

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

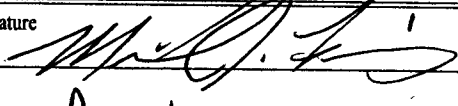
FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. 14-20-151-54
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name Southern Ute Indian Tribe
2. Name of Operator Coleman Oil & Gas, Inc.		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Drawer 3337, Farmington, NM 87499	3b. Phone No. (include area code) 505-327-0366	8. Lease Name and Well No. Coleman La Plata 34-7 34 #1
3a. Address P.O. Drawer 3337, Farmington, NM 87499		9. API Well No.
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 232' FSL / 704' FEL; T34N, R7W Sec. 33; At proposed prod. zone TOC 660' FSL/660' FWL; BOC 742' FSL/923' FWL; T34N, R7W Sec. 34		10. Field and Pool, or Exploratory Fruitland Coal
14. Distance in miles and direction from nearest town or post office* Appx. 1.85 miles from well pad to Ignacio, CO. city limits		11. Sec., T. R. M. or Blk. and Survey or Area T34N, R7W, Sec. 33: SE4/SE4 Surface T34N, R7W, Sec. 34: SW4/SW4 Bottom
15. Distance from proposed* location to nearest property or lease line, ft. 170' from nearest property line. 232' from unit line. (Also to nearest drig. unit line, if any)	16. No. of acres in lease 320	17. Spacing Unit dedicated to this well 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1850'	19. Proposed Depth 3714'	20. BLM/BIA Bond No. on file IS0085525U & IS0000907
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6726' GL	22. Approximate date work will start* 12/01/2014	23. Estimated duration 42 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature 	Name (Printed/Typed) Michael J. Finney	Date 9/24/14
Title Agent		
Approved by (Signature)	Name (Printed/Typed)	Date
Title Office		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

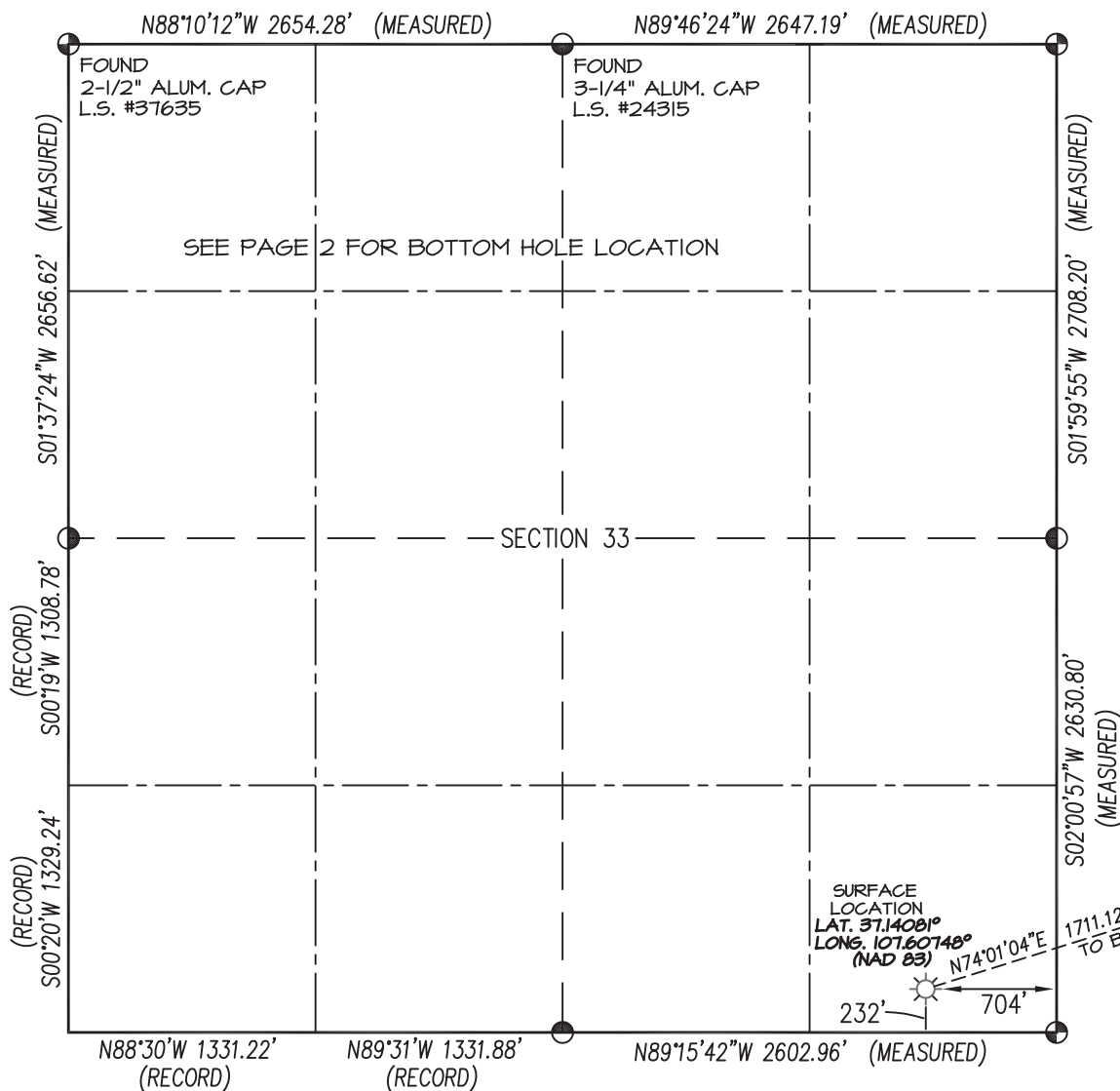
\*(Instructions on page 2)

# COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1

PAGE 1 OF 2

**SURFACE LOCATION: 232' FSL & 704' FEL**  
**SEC. 33, T-34-N, R-7-W, S.U.L., N.M.P.M., LA PLATA COUNTY, COLORADO.**  
**GROUND LEVEL ELEVATION: 6726'**

**BOTTOM HOLE LOCATION: 742' FSL & 923' FWL**  
**SEC. 34, T-34-N, R-7-W, S.U.L., N.M.P.M., LA PLATA COUNTY, COLORADO.**



BASIS OF BEARING:

REAL-TIME KINEMATIC GPS SURVEY  
 SOLUTION OF CO SOUTH STATE  
 PLANE (NAD 83) COORDINATE GRID  
 - NO ROTATION OR SCALE FACTOR APPLIED -

BASIS OF ELEVATION

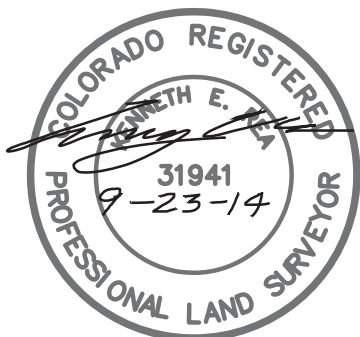
N.G.S. SURVEY MARK "IGNATIO" LOCATED IN THE  
 SE/4 NE/4 OF SECTION 6, T33N, R7W, N.M.P.M., LA PLATA  
 COUNTY COLORADO. REFERENCE ELEVATION = 6590'

## NOTES:

1. WELL LOCATION FOOTAGE CALLS MEASURED PERPENDICULAR TO SECTION LINES.
2. SURFACE USE FOR THE LAND SURROUNDING THIS LOCATION IS DRY GRASS LAND.
3. VISIBLE IMPROVEMENTS WITHIN 500' OF WELL BORE LOCATION ARE SHOWN ON ATTACHED 500' RADIUS VISIBLE IMPROVEMENT DETAIL.
4. THERE ARE NO PUBLIC ROADS, MAJOR ABOVE GROUND UTILITIES, OR RAILROADS WITHIN 200' OF THE WELL BORE LOCATION.
5. THERE ARE NO PROPERTY BOUNDARY LINES WITHIN 150' OF THE WELL BORE LOCATION.
6. WELL GPS OBSERVATION PERFORMED BY SCOTT WEIBE ON DATE OF SURVEY - PDOP VALUE = 2.19
7. THIS EXHIBIT IS INTENDED TO DEPICT THE PROPOSED WELL LOCATION AND DOES NOT REPRESENT A MONUMENTED BOUNDARY SURVEY.

and denote found  
 3-1/4" B.L.M. Aluminum Cap  
 unless otherwise noted.

RECORD DIMENSIONS SHOWN PER 1995  
 B.L.M. DEPENDENT RESURVEY.



I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE WELL LOCATION SHOWN ON THIS PLAT IS ACCURATELY PLOTTED FROM FIELD NOTES OF ACTUAL SURVEYS MADE UNDER MY DIRECT SUPERVISION, AND THAT THIS PLAT IS NOT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT, AND THAT IS IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OF FENCE, BUILDING, OR OTHER FUTURE IMPROVEMENT LINES.

BHL REVISION: 9/19/14

DRAWN BY: K.R. SURVEYED: 9/26/13  
 CHECKED BY: K.R. DRAWN: 1/21/14  
 FILE NO.: CM003WP JOB NO.: CM003

PREPARED FOR:

**COLEMAN OIL & GAS, INC.**

**NORTHSTAR**  
**SURVEYING & MAPPING, INC.**

768 County Rd. 308  
 DURANGO, CO. 81303  
 (970) 385-0851

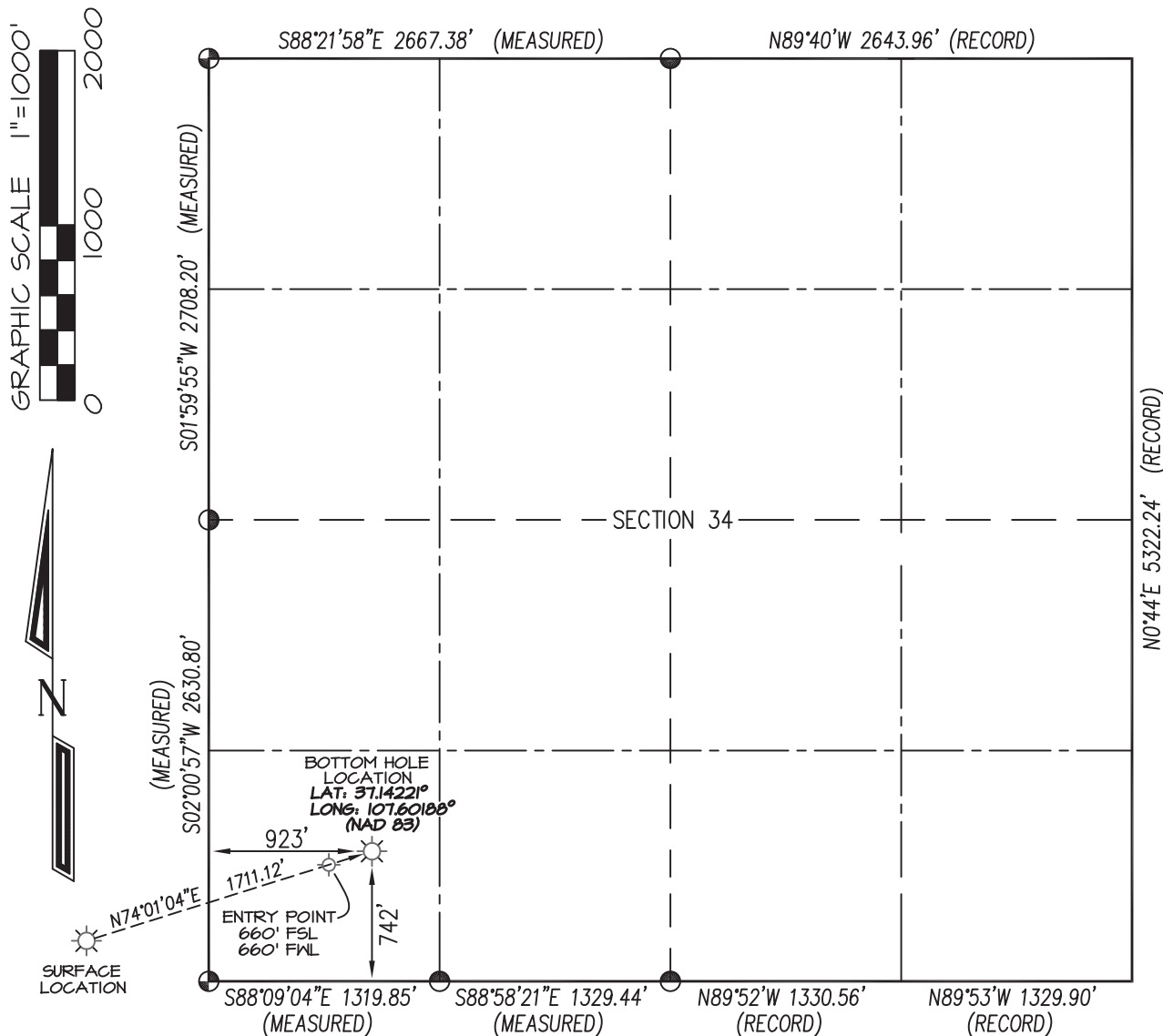
# COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1

PAGE 2 OF 2

SURFACE LOCATION: 232' FSL & 704' FEL  
SEC. 33, T-34-N, R-7-W, S.U.L., N.M.P.M., LA PLATA COUNTY, COLORADO.

GROUND LEVEL ELEVATION: 6726'

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SEC. 34, T-34-N, R-7-W, S.U.L., N.M.P.M., LA PLATA COUNTY, COLORADO.



BASIS OF BEARING:  
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SOLUTION OF CO SOUTH STATE  
PLANE (NAD 83) COORDINATE GRID  
- NO ROTATION OR SCALE FACTOR APPLIED -

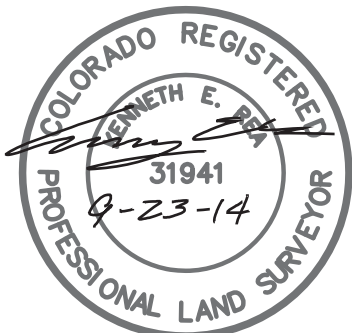
BASIS OF ELEVATION:  
N.G.S. SURVEY MARK "IGNATIO" LOCATED IN THE  
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COUNTY COLORADO. REFERENCE ELEVATION = 6590'

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7. THIS EXHIBIT IS INTENDED TO DEPICT THE PROPOSED WELL LOCATION AND DOES NOT REPRESENT A MONUMENTED BOUNDARY SURVEY.

and denote found 3-1/4" B.L.M. Aluminum Cap unless otherwise noted.

RECORD DIMENSIONS SHOWN PER 1995 B.L.M. DEPENDENT RESURVEY.



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BHL REVISION: 9/19/14

DRAWN BY: K.R. SURVEYED: 9/26/13  
CHECKED BY: K.R. DRAWN: 1/21/14  
FILE NO.: CM003WP JOB NO.: CM003

PREPARED FOR:

COLEMAN OIL & GAS, INC.

**NORTHSTAR**  
SURVEYING & MAPPING, INC.

768 County Rd. 308  
DURANGO, CO. 81303  
(970) 385-0851

## PAD DRAWING

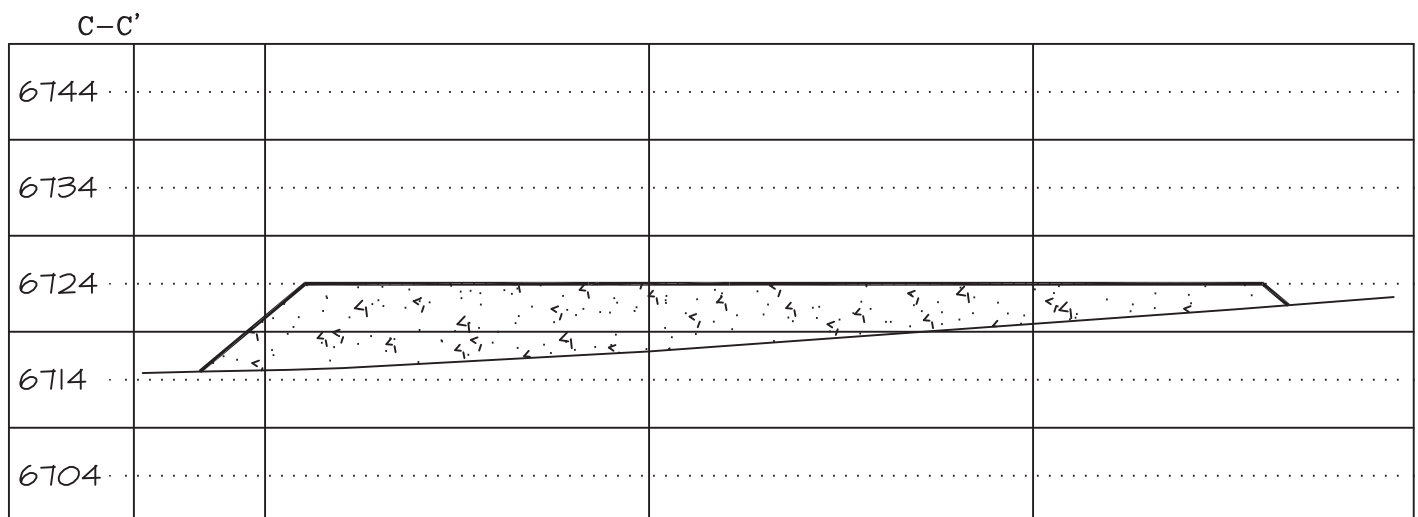
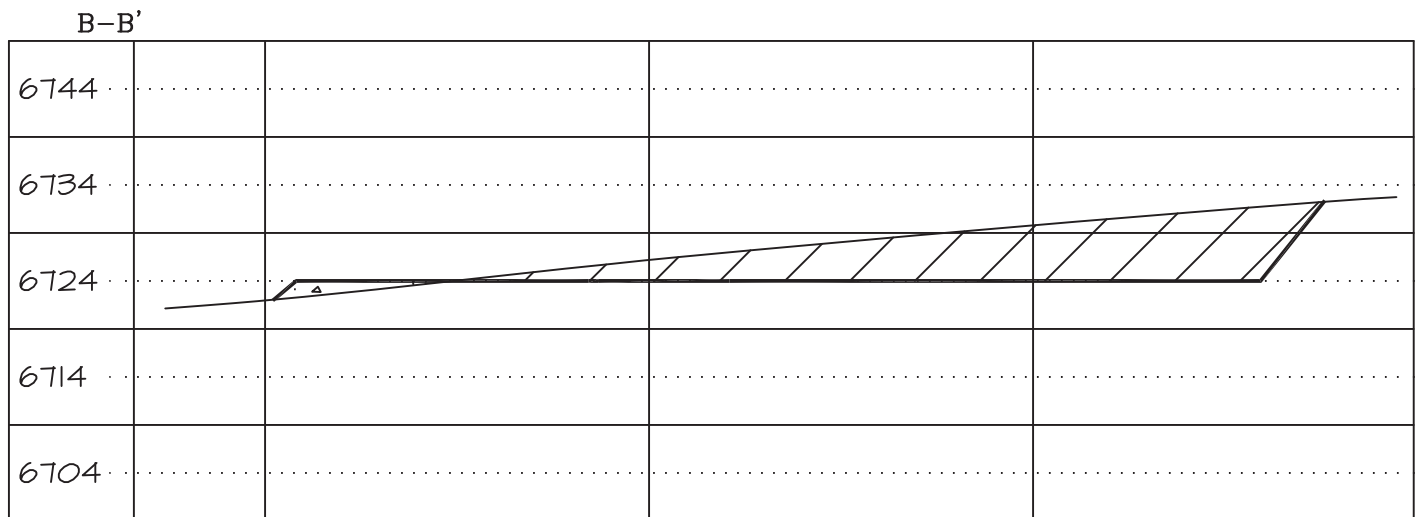
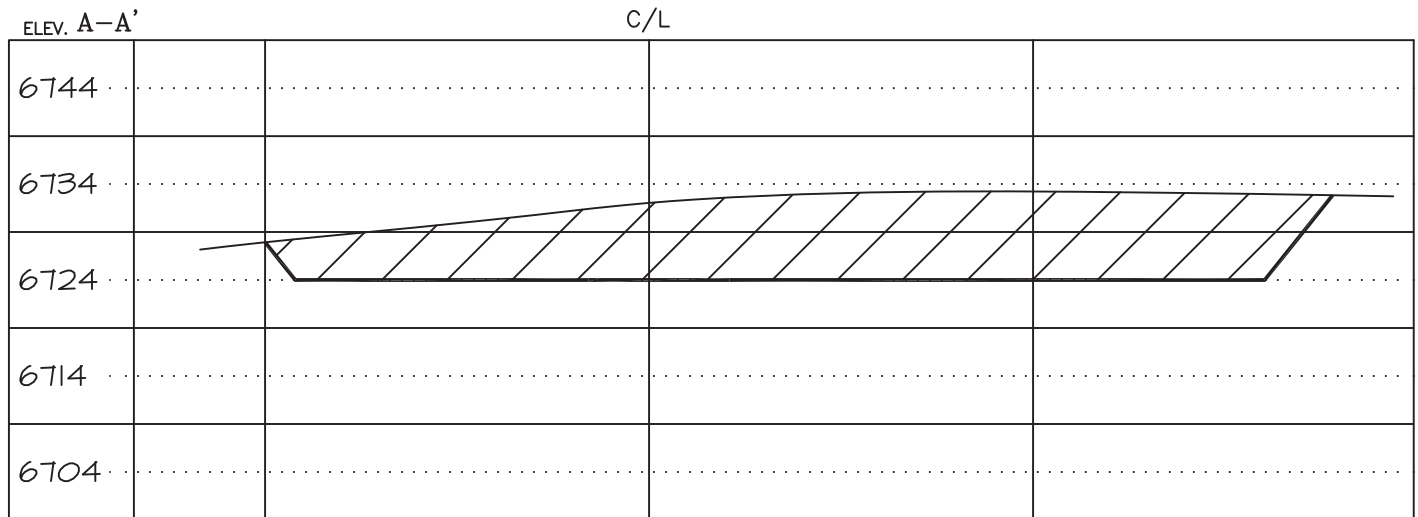
(E.D.) DENOTES EDGE OF DISTURBANCE





**COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1**  
**232' FSL, 704' FEL, SECTION 33, T-34-N, R-7-W, S.U.L., N.M.P.M.,**  
**LA PLATA COUNTY, CO. GROUND LEVEL ELEVATION: 6726'**

**PAD CROSS SECTION DETAIL**



VERTICAL SCALE: 1" = 20' / HORIZONTAL SCALE: 1" = 50'

DATE DRAWN: 1/20/14

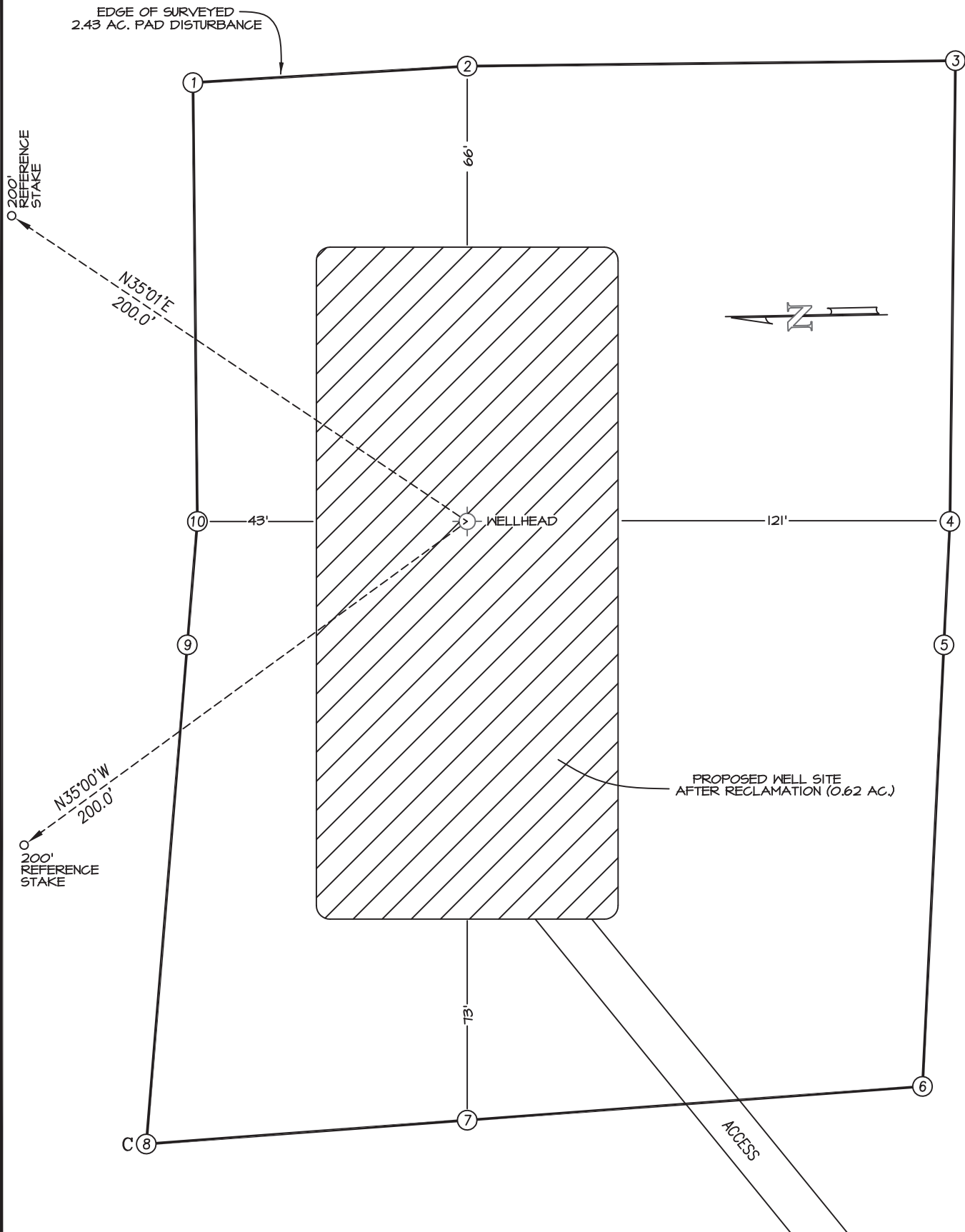
NORTHSTAR SURVEYING & MAPPING, INC.

FILE NO: CM002CFB

DRAWN BY: K.R.

CHECKED BY: K.R.

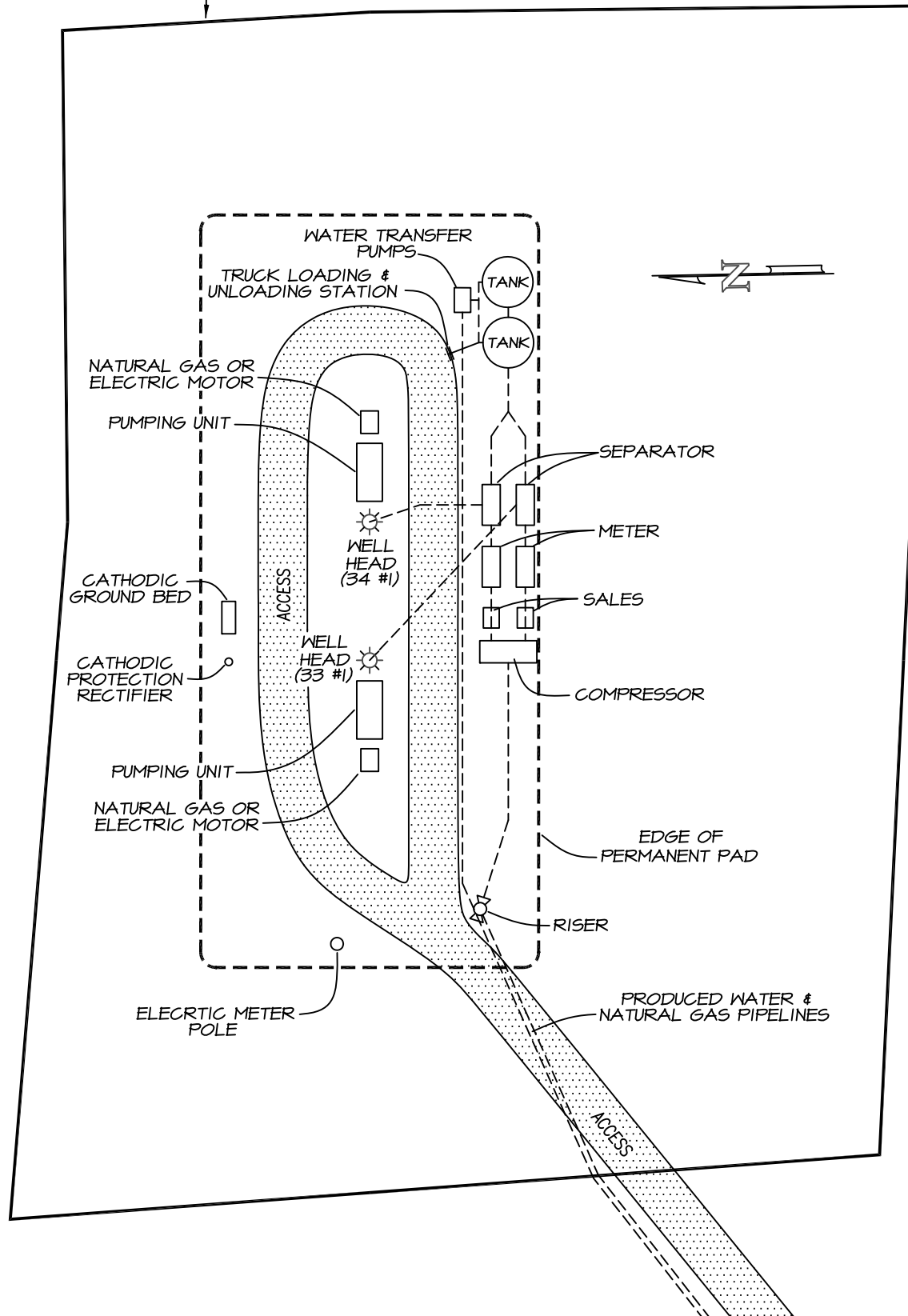
COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1  
 232' FSL, 704' FEL, SECTION 33, T-34-N, R-7-W, S.U.L., N.M.P.M.,  
 LA PLATA COUNTY, CO. GROUND LEVEL ELEVATION: 6726'



COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1 & LA PLATA 34-7-33 #1  
SE/4 SE/4, SECTION 33, T-34-N, R-7-W, S.U.L., N.M.P.M.,  
LA PLATA COUNTY, CO.

FACILITY LAYOUT DIAGRAM

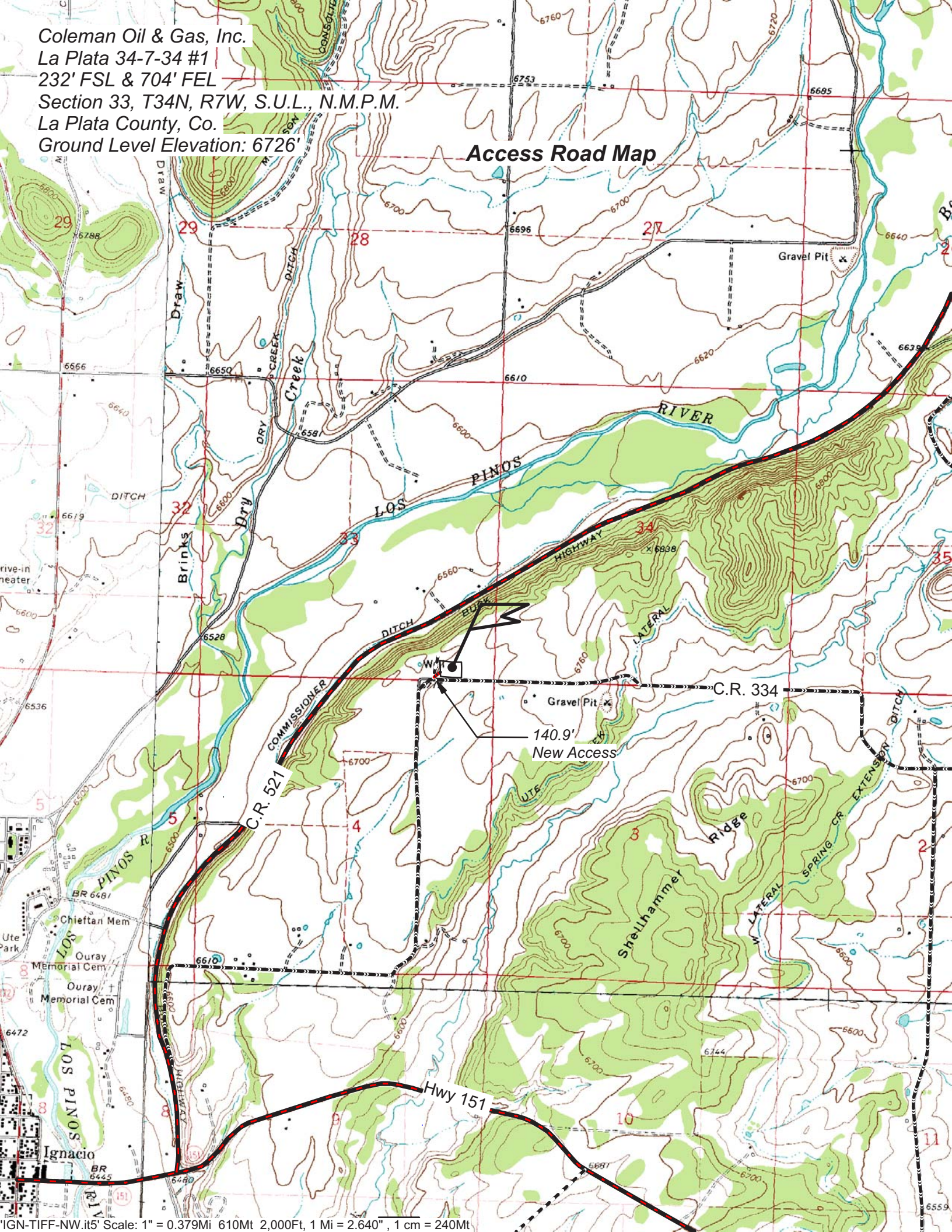
EDGE OF SURVEYED  
2.43 AC. PAD DISTURBANCE





Coleman Oil & Gas, Inc.  
La Plata 34-7-34 #1  
232' FSL & 704' FEL  
Section 33, T34N, R7W, S.U.L., N.M.P.M.  
La Plata County, Co.  
Ground Level Elevation: 6726'

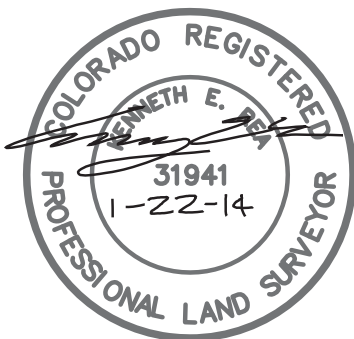
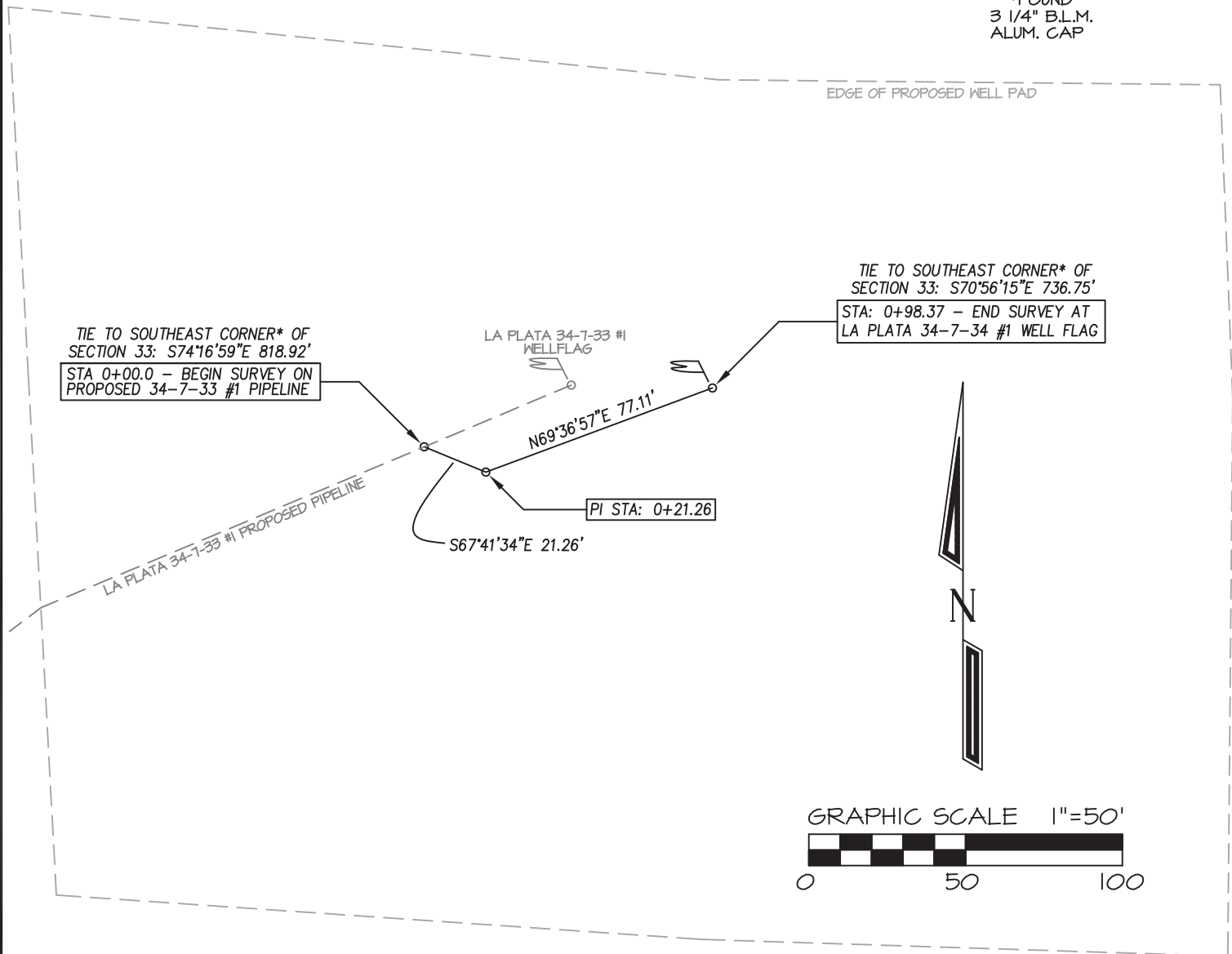
### Access Road Map





**COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1  
PROPOSED PIPELINE LOCATED IN THE SE/4 NE/4 OF SECTION 33,  
T34N, R7W, N.M.P.M., S.U.L., LA PLATA COUNTY, COLORADO**

\*FOUND  
3 1/4" B.L.M.  
ALUM. CAP



OWNERSHIP	STATION	FEET/RODS
Lon Parmiter	0+00.0 TO 0+98.37	98.37 / 5.96

**BASIS OF BEARING:**

REAL-TIME KINEMATIC GPS SURVEY  
SOLUTION OF CO SOUTH STATE  
PLANE (NAD 83) COORDINATE GRID  
-NO ROTATION OR SCALE FACTOR APPLIED-

DRAWN BY: K.R.	SURVEYED: 1/21/14
CHECKED BY: K.R.	DRAWN: 1/22/14
FILE NO.: CM002PL	JOB NO. CM002

PREPARED FOR:

**COLEMAN OIL & GAS, INC.**

**NORTHSTAR  
SURVEYING & MAPPING, INC.**

768 County Rd. 308  
DURANGO, CO. 81303  
(970) 385-0851

I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

**COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1 - PROPOSED PIPELINE**  
**LEGAL DESCRIPTION**

A pipeline easement being forty feet (40') wide, located in the SE/4 SE/4 of Section 33, T34N, R7W, S.U.L., N.M.P.M., La Plata County, Colorado.

Said easement lying twenty feet (20') on each side of the following described centerline:

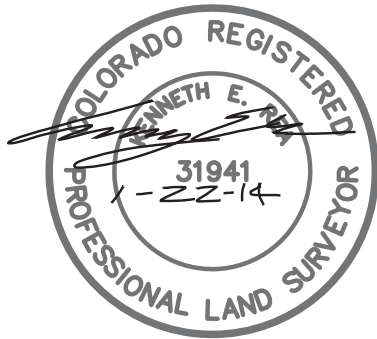
Beginning at a point on proposed La Plata 34-7-33 #1 pipeline, whence the Southeast corner of said Section 33, being a 3-1/4" B.L.M. aluminum cap, bears S74°16'59"E a distance of 818.92 feet.

Thence S67°41'34"E a distance of 21.26 feet,

Thence N69°36'57"E a distance of 77.11 feet, ending at Coleman Oil & Gas Inc. La Plata 34-7-34 #1 wellflag, whence said Southeast corner of Section 33 bears S70°56'15"E a distance of 736.75 feet.

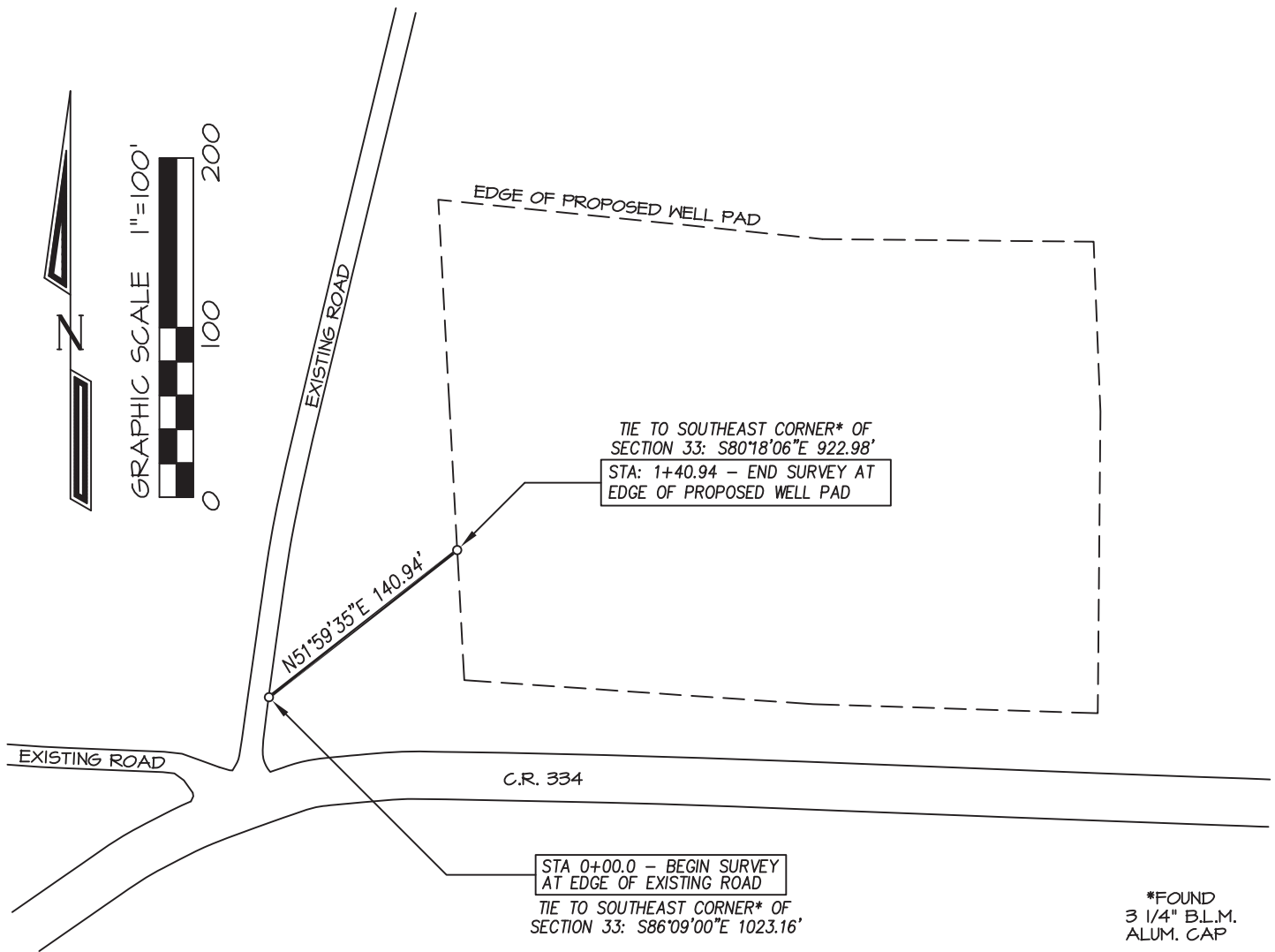
Described easement being 98.37 feet in length & containing 0.09 acres, more or less.

PREPARED BY:  
KENNETH E. REA P.L.S. #31941

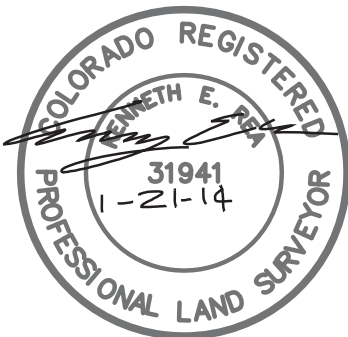




**COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1**  
**PROPOSED ACCESS ROAD LOCATED IN THE SE/4 SE/4 OF SECTION 33,**  
**T34N, R7W, N.M.P.M., S.U.L., LA PLATA COUNTY, COLORADO**



OWNERSHIP	STATION	FEET/RODS
Lon Parmiter	0+00.0 TO 1+40.94	140.94 / 8.54



**BASIS OF BEARING:**

REAL-TIME KINEMATIC GPS SURVEY  
 SOLUTION OF CO SOUTH STATE  
 PLANE (NAD 83) COORDINATE GRID  
 -NO ROTATION OR SCALE FACTOR APPLIED-

I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DRAWN BY: K.R. CHECKED BY: K.R. FILE NO.: CM002PL	SURVEYED: 9/27/13	PREPARED FOR:  <b>COLEMAN OIL &amp; GAS, INC.</b>
	DRAWN: 1/21/14	
	JOB NO. CM002	
<b>NORTHSTAR</b> SURVEYING & MAPPING, INC. 768 County Rd. 308 DURANGO, CO. 81303 (970) 385-0851		

**COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1 - PROPOSED ACCESS**  
**LEGAL DESCRIPTION**

An access easement being twenty feet (20') wide, located in the SE/4 SE/4 of Section 33, T34N, R7W, S.U.L., N.M.P.M., La Plata County, Colorado.

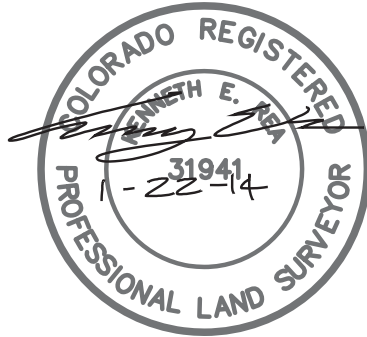
Said easement lying ten feet (10') on each side of the following described centerline:

Beginning at the edge of an existing road, whence the Southeast corner of said Section 33, being a 3-1/4" B.L.M. aluminum cap, bears S86°09'00"E a distance of 1023.16 feet.

Thence N51°59'35"E a distance of 140.94 feet, ending at edge of Coleman Oil & Gas Inc. La Plata 34-7-34 #1 proposed well pad, whence said Southeast corner of Section 33 bears S80°18'06"E a distance of 922.98 feet.

Described easement being 140.94 feet in length & containing 0.065 acres, more or less.

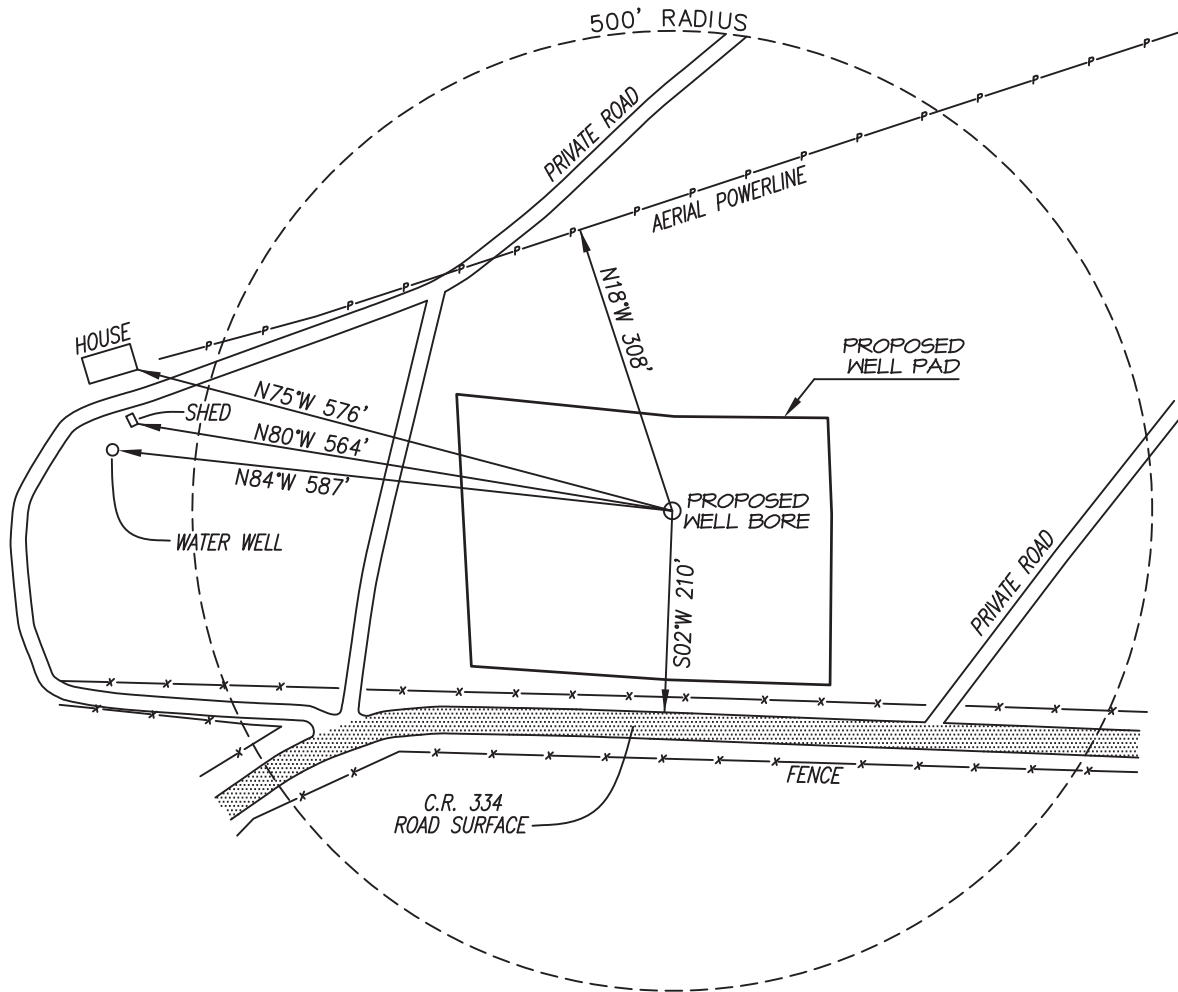
PREPARED BY:  
KENNETH E. REA P.L.S. #31941



COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1  
232' FSL, 704' FEL, SECTION 33, T-34-N, R-7-W, S.U.L., N.M.P.M.,  
LA PLATA COUNTY, CO. GROUND LEVEL ELEVATION: 6726'

500' RADUIS VISIBLE IMPROVEMENT DETAIL

SURFACE USE = DRY GRASSLAND



GRAPHIC SCALE 1"=200'



*Coleman Oil & Gas, Inc.*

**La Plata 34-7-34 #1**

232' FSL, 704' FEL Section 33, T34N, R7W, S.U.L., La Plata County, Co.



Looking North



Looking East



Looking South



Looking West



Access at Well Location



Access at Road

All photos taken 9/26/2013

**Directions from the Intersection of State Highway 172 & State Highway 151 in Ignacio, CO**

**to Coleman Oil & Gas, Inc: La Plata 34-7-34 #1**

**232' FSL & 704' FEL, Section 33, T34N, R7W, S.U.L., N.M.P.M., La Plata County, CO.**

From the Intersection of State Highway 172 & State Highway 151 in Ignacio, CO. travel East on State Hwy 151 for 0.5 miles;

Go left (North) on County Road 521 for 0.3 miles;

Go right (Northeast) on County Road 334 for 2.2 miles;

Go left (North) on existing road for 50';

Go right (Northeast) following flagged access for 140.9 feet to staked well location.



**PO DRAWER 3337  
FARMINGTON, NM 87499**

Office phone: 505.566.1993  
Fax 505.327.9425  
E-mail: [ccoleman@cog-fmn.com](mailto:ccoleman@cog-fmn.com)



**Coleman Oil and Gas, Inc.**

September 5, 2014

Bureau of Land Management  
C/o Tres Rios Field Office  
15 Burnett Ct.  
Durango, CO 81301

Re: Designation of Agent  
Finney Land Company

Dear Madam or Sir:

Coleman Oil and Gas, Inc. (Coleman) hereby authorizes Finney Land Company to prepare, execute and submit various permit applications, requests and documents and to accept notices and perform other actions needed on behalf of Coleman.

Please do not hesitate to contact the undersigned should you require additional information on Finney Land Company or this designation and authorization of agent.

Sincerely,  
COLEMAN OIL & GAS, INC.

G. Chris Coleman  
President

Cc: Mike Finney  
Dough Joyce  
Mike Hanson

**RECEIVED**

**SEP 09 2014**

Bureau of Land Management  
Durango, Colorado



**PO DRAWER 3337  
FARMINGTON, NM 87499**

Office phone: 505.566.1993  
Fax 505.327.9425  
E-mail: [ccoleman@cog-fmn.com](mailto:ccoleman@cog-fmn.com)



**Coleman Oil and Gas, Inc.**

September 5, 2014

Bureau of Land Management  
C/o Tres Rios Field Office  
15 Burnett Ct.  
Durango, CO 81301

Re: Designation of Agent  
Robert D. Joyce

Dear Madam or Sir:

Coleman Oil and Gas, Inc. (Coleman) hereby authorizes Robert D. Joyce, as agent, to prepare, execute and submit various permit applications, requests and documents and to accept notices and perform other actions needed on behalf of Coleman.

Please do not hesitate to contact the undersigned should you require additional information.

Sincerely,  
COLEMAN OIL & GAS, INC.

G. Chris Coleman  
President

Cc: Mike Finney  
Dough Joyce  
Mike Hanson

**RECEIVED**

**SEP 09 2014**

Bureau of Land Management  
Durango, Colorado



**United States Department of the Interior**  
**Bureau of Indian Affairs**  
**Southwest Region**  
1001 Indian School Road N.W.  
Albuquerque, New Mexico 87104-2303



In Reply Refer To:  
620-Division of Environmental, Safety, and  
Cultural Resources Management  
Southern Ute 2014-077

**MAR 04 2014**

Mr. Doug Joyce  
Finney Land Company  
P.O. Box 2471  
Durango, Colorado 81302

Dear Mr. Joyce:

We have received a report entitled, "A Cultural Resource Inventory for the Proposed Coleman Oil & Gas La Plata 34-7-33 No. 1 and La Plata 34-7-34 No. 1 Well Pad, Access Road, and Pipeline Project on Private Lands in La Plata County, Colorado." This was prepared by Ms. Jamie Karslon, Archeologist, Stratified Environmental and Archaeological Services, LLC (SEAS), is dated February 11, 2014, and is numbered SEAS Report 13-069. We understand that you also have a copy of this report.

The report describes a cultural resources survey of a proposed activity requiring Bureau of Indian Affairs (BIA) approval that has the potential to impact significant cultural resources on private lands, and is considered an "undertaking" under 36 CFR 800.16(y). This survey was performed as part of the Federal requirement for compliance with Section 106 of the National Historic Preservation Act (16 USC 470) to identify and evaluate any effects to historic properties as a result of this undertaking.

We have reviewed this report and note that no surface evidence of potentially significant cultural resources was encountered during the requisite field survey. Therefore, we have determined that no historic properties will be affected by the proposed action. We have notified the Colorado State Historic Preservation Officer of our determination and we have provided a copy of this report for their files.

The proposed undertaking is in compliance with the provisions of Section 106 of the National Historic Preservation Act subject to the following stipulations:

1. All land-altering activities shall be confined to the area surveyed for cultural resources, and the project sponsor shall control the action of its agents at the job site to ensure that no archaeological sites are disturbed or damaged. Site disturbance or damage to sites on tribal land is a violation of the Archaeological Resources Protection Act (16 U.S.C. § 470ee) which prohibits the excavation, removal, damage, alteration or defacement, or attempt to excavate, remove, damage, alter or deface any archaeological resources [cultural resources] located on Federal or Indian Lands. Both criminal and civil penalties may be assessed (16 U.S.C. §§ 470ee and 470ff) for violations.
2. If subterranean cultural resources or human remains are encountered, all land-altering activities shall cease within 50 feet of the discovery and the Southern Ute Tribe and the Bureau of Indian Affairs (BIA), Regional Archeologist shall be notified immediately for consultation on the treatment of the discovery.

These stipulations must be followed or project suspensions will be issued. The responsibility of project sponsors is to notify subcontractors of the project boundaries and stipulations. Any change in the type of development activities, change in project boundaries, or addition of new project areas, easements or improvements to existing easements, which are outside of the currently defined project area, shall require additional survey, review, and consultation.

This letter only serves as notification that National Historic Preservation Act Section 106 compliance has been completed for the subject project. It does not constitute approval of right-of-way or concurrence in the proposed activities by the Bureau of Indian Affairs (BIA). This compliance is one of several legal requirements that must be accomplished before BIA approval of rights-of-way, easements, or other land use contracts for land modifying projects.

Should you have any questions, please contact Dr. Bruce G. Harrill, Regional Archeologist, Division of Environmental, Safety, and Cultural Resources Management, at (505) 563-3407.

Sincerely,

A handwritten signature in black ink, appearing to read "Ryan K. Rely". The signature is fluid and cursive, with the first name "Ryan" and last name "Rely" being prominent.

**Acting** Regional Director

cc: Superintendent, Southern Ute Agency, Attn: Realty  
Mr. Edward C. Nichols, Colorado Preservation Office w/rpt  
Ms. Jamie Karlson, SEAS  
Natural Resources Division Chief, Southern Ute Tribe

## DRILLING OPERATION PLAN

**Well Name:** La Plata 34-7-34#1

**Surface Location:**

**Bottom Hole Location:**

232' FSL, 704' FEL Section 33, T-33-N, R-7-W, NMPM  
La Plata, CO  
742' FSL, 923' FWL Section 34, T-34-N, R-7-W, NMPM  
Basin Fruitland Coal  
6726' GL, 6741' KB, 15'KB

**Formation:**

**Elevation:**

Formation:	Top	Bottom	Contents
San Jose	Surface	1745	aquifer
Ojo Alamo	1745	1815	aquifer
Kirtland	1815	2815	
Fruitland	2815	2965	gas
Basal Coal	2930	2965	gas
Pictured Cliffs	3000	3175	gas
Total Depth	3714 MD		

Formation Depths Are True Vertical Depths Not Measured Depths

**Drilling Contractor:** Availability

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0' - 400'	Spud	8.4 - 9.0	40 - 50	no control
400' - 3714"	Non-dispersed	8.4 - 9.7	30 - 60	6cc or less

Depths Are True Vertical Depths Not Measured Depths

**Logging Program:** Triple Combo (Induction and Density Logs at TD)

**Directional Program:** To be submitted and approved prior to SPUD

**Horizontal Program:** To be submitted and approved prior to setting Whipstock

**Coring Program:** None

**DST Program:** None

**Casing Program:**

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
12 1/4"	0' - 400'	9 5/8"	36#	J-55 or K-55
8 3/4"	400' - 3714'	7"	26#	J-55 or K-55

Depths Are True Vertical Depths Not Measured Depths.

**Tubing Program:**

0' - 3060'      2 7/8"      6.50#      J-55

**Float Equipment:**

9 5/8" surface casing – Insert float with saw tooth guide shoe and three centralizers.

7" production casing – Cement guide shoe and self fill insert float collar. Place float one joint above shoe. Five centralizers spaced every other joint above shoe. One turbolizing type centralizer below and two standard through the Ojo Alamo @ 1745' – 1815' TVD. Standard centralizers thereafter spaced every fourth up to base of surface pipe.

**Wellhead Equipment:** 9 5/8" x 7" x 2 7/8" minimum 2000 psi xmas tree assembly

**Cementing:**

9 5/8" Surface Casing -

Cement with 230 sacks HALCEM (TM) SYSTEM .125 lbm Poly-E-Flake and 2% calcium chloride (Yield = 1.174 cu. ft./sack; slurry weight = 15.8 PPG). Total cement volume is 270.02 cu. ft. (100% excess calculated on cement volumes). Circulate cement to surface. WOC 12 hrs. Test casing to 750 psi/30 minutes.

7" Production Casing -

Before cementing circulate hole with at least 1 1/2 hole volumes of mud. Precede cement with 30 bbls of fresh water. Lead with 341 sacks (767.59 cu. ft) of Class "G" with .30% D-AIR 5000, 0.50% Fe-2, 5 lbm Gilsonite and .125 lbm Poly-E-Flake. (Yield = 2.251 cu. ft. /sack; slurry weight = 12.5 PPG). Tail with 100 sacks (182 cu. ft.) of Class "G" with .30% Super CBL, .30% D-AIR 5000, 0.50% Fe-2, 5 lbm Gilsonite and .125 lbm Poly-E-Flake. (Yield = 1.82 cu. ft./sack; slurry weight = 13.5 PPG). Total cement volume is 949.59 cu. ft. (75% excess on open hole, calculated on cement volumes).

**BOP and Tests:**

Surface to Surface Total Depth – None

Surface TD to Total Depth – Annular or Double Ram Type 2000 psi (minimum) double gate BOP stack (Reference Figure #1, #2, #3). Prior to drilling out surface casing, test blind rams and casing to 750 psig for 30 minutes; all pipe rams and choke assembly to 750 psig for 15 minutes each.

From Surface TD to Total Depth - choke manifold (Reference Figure #3).

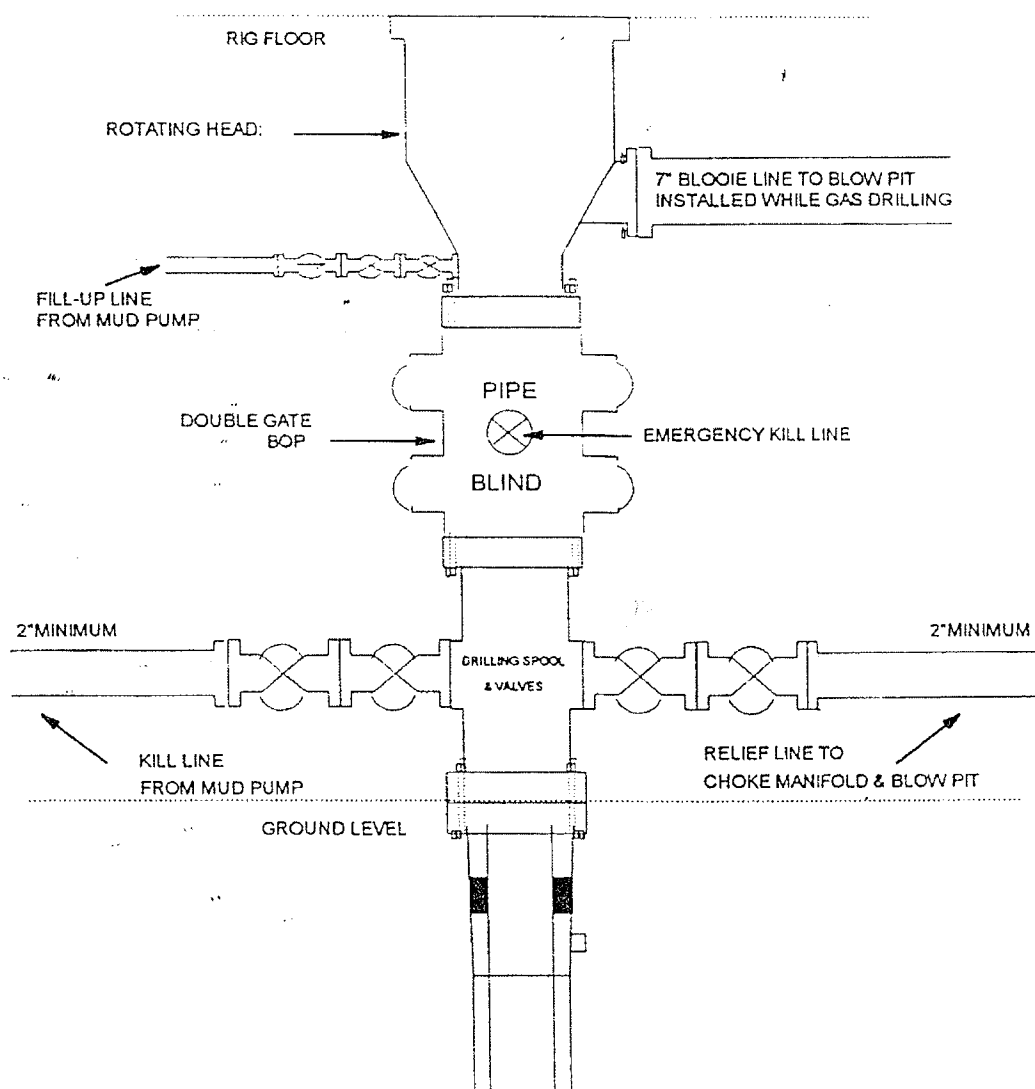
Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

**Additional information:**

- The Fruitland Coal formation will be completed.
- Anticipated pore pressure for the Fruitland Coal is 1000 psi.
- New casing will be utilized.
- Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

Date: 9/4/2014 Drilling Engineer: Michael J. Hansen

## BOP Configuration 2M psi System

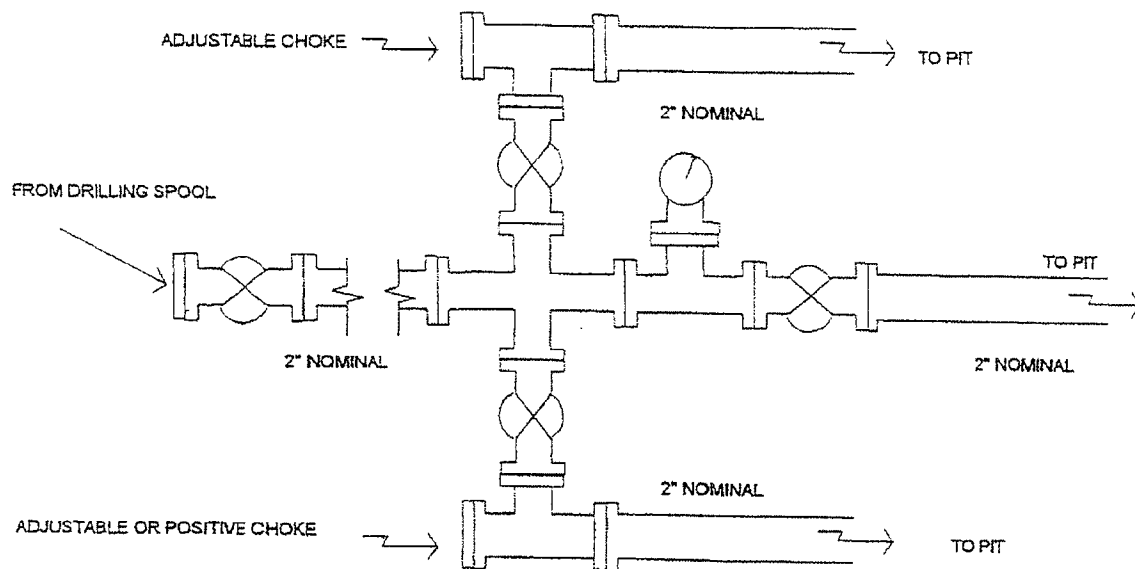


13 5/8" and 11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/ or greater.

**FIGURE #1**



## Choke Manifold Configuration 2M System



Minimum choke manifold installation from surface to Total Depth.  
2" minimum, 2000psi working pressure equipment with two chokes.

FIGURE #2

# Cementing Usage Plan

La Plata 34-7-34 #1

Enter Surface Casing Depth	400	FT
Enter capacity between Surf casing/ hole	0.3131	cu ft per ft
Enter Yield for surface cement job	1.174	cu ft per sack
Enter Shoe length for Surface Pipe	44	
Enter Surface Casing Capacity	0.4341	
Enter capacity between Prod/Surface Casings	0.1668	cu ft per ft
Enter Total Depth	3714	FT
Enter Shoe Joint Length	44	FT
Enter PBSD	3670	FT
Enter Capacity between Production/Hole	0.1503	cu ft. per ft
Enter Lead Cement Yield	2.251	cu ft per sack
Enter Tail Cement Yield	1.82	cu ft per sack
Enter Production Casing Capacity	0.0383	bbl per ft
Enter Amount of Tail Cement Required	100	Sacks

Surface Cement Needed (100% excess)      230      Sacks → 270.02    cu ft

TOTAL HOLE REQUIREMENTS      947.85    cu ft of cement

Lead Cement      →      341      Sacks → 767.59 cu ft

Tail Cement      →      100      Sacks → 182.00 cu ft

TOTAL CEMENT VOLUME      949.59    cu ft

\*\*\*\*WILL NEED TO CHECK MEASURED DEPTH AT END OF HOLE FOR CORRECT VOLUME OF CEMENT.

\*\*\*\*CHECK CEMENT VOLUMES WITH OPEN HOLE CALIPER LOG.

# **Coleman Oil & Gas**

**La Plata County CO**

**SEC 34-7-34 #1**

**La Plata 34-7-34 #1**

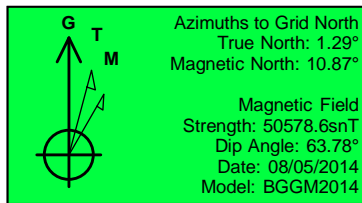
**Pilot Hole**

**Plan: Plan #1**

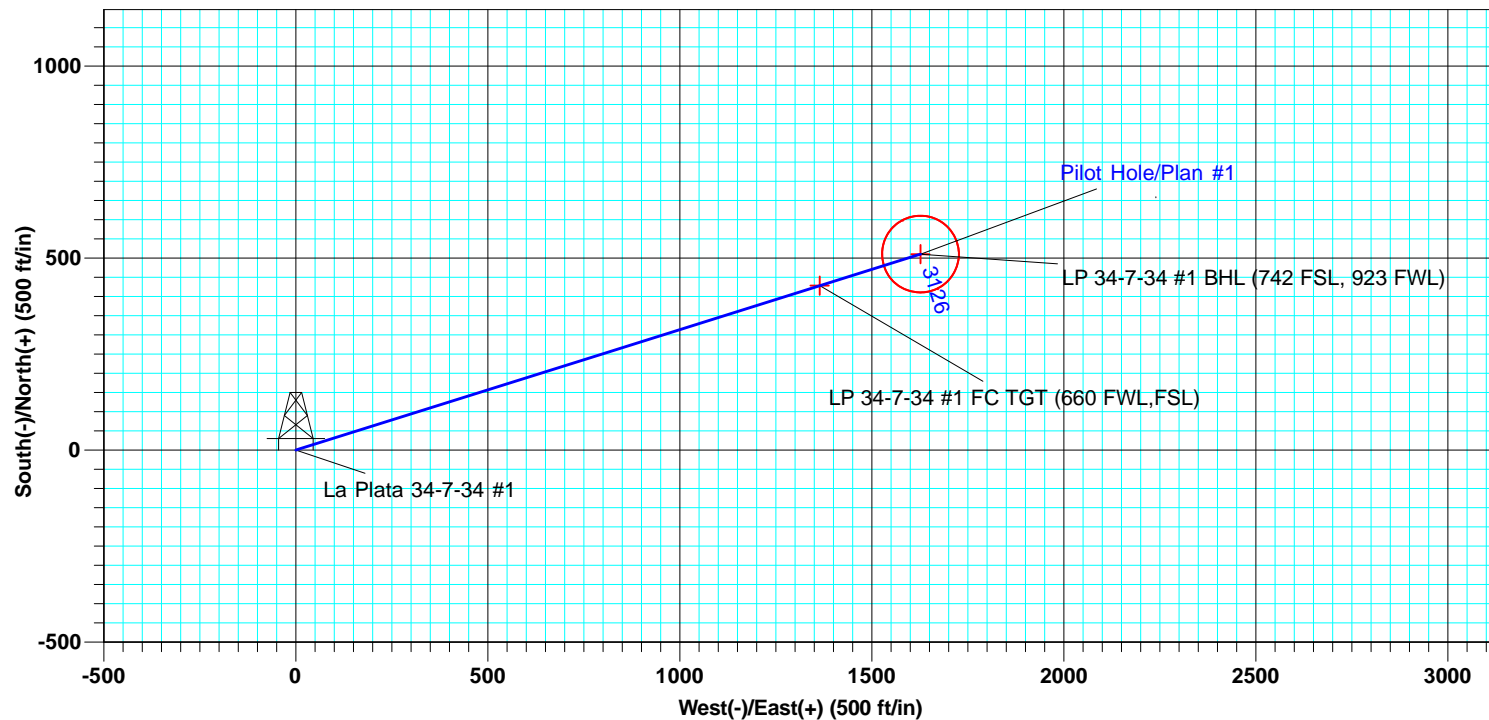
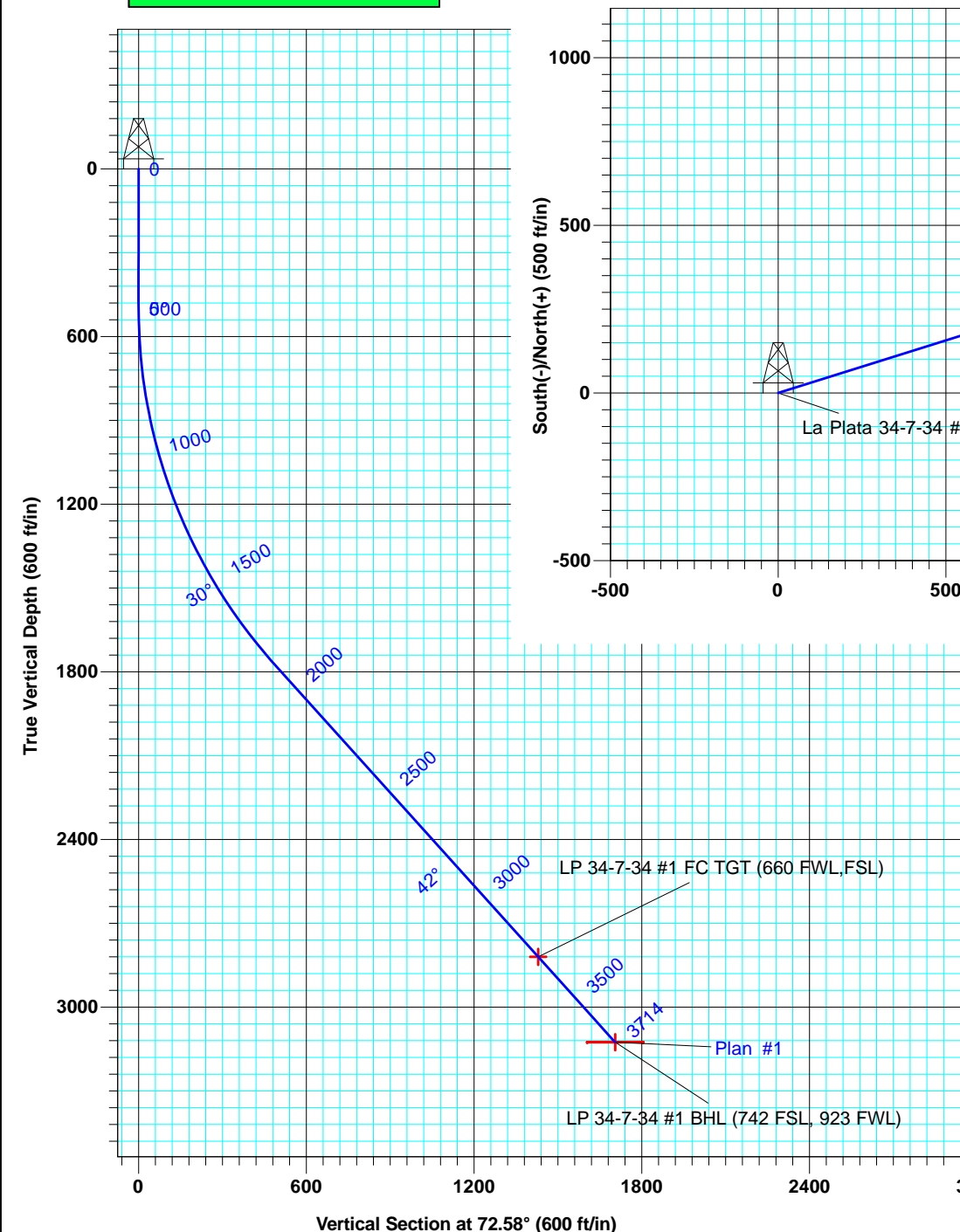
## **Standard Planning Report**

**06 August, 2014**





Project: La Plata County CO  
 Site: SEC 34-7-34 #1  
 Well: La Plata 34-7-34 #1  
 Wellbore: Pilot Hole  
 Design: Plan #1



DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP 34-7-34 #1 FC TGT (660 FWL, FSL)	2820.0	428.0	1364.0	37° 8' 31.450 N	107° 36' 10.206 W
LP 34-7-34 #1 BHL (742 FSL, 923 FWL)	3125.5	510.4	1626.7	37° 8' 32.324 N	107° 36' 6.985 W

WELL DETAILS La Plata 34-7-34 #1					
DFE @ 6738.5ft (GL + 12.5')					
Ground Level: 6726.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1179575.80	2385725.20	37° 8' 26.916 N	107° 36' 26.928 W

**SITE DETAILS: SEC 34-7-34 #1**  
 Site Centre Northing: 1179575.80  
 Easting: 2385725.20  
 Positional Uncertainty: 1.0  
 Convergence: -1.29  
 Local North: Grid

**PROJECT DETAILS: La Plata County CO**  
 Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Colorado Southern Zone  
 System Datum: Mean Sea Level

**ALL AZIMUTHS MUST BE CORRECTED TO GRID NORTH**

To convert a Magnetic Direction to a Grid Direction, Add 10.87°  
 To convert a True Direction to a Grid Direction, Add 1.29°

<b>Database:</b>	EDM 5000.1 Old	<b>Local Co-ordinate Reference:</b>	Well La Plata 34-7-34 #1
<b>Company:</b>	Coleman Oil & Gas	<b>TVD Reference:</b>	DFE @ 6738.5ft (GL + 12.5')
<b>Project:</b>	La Plata County CO	<b>MD Reference:</b>	DFE @ 6738.5ft (GL + 12.5')
<b>Site:</b>	SEC 34-7-34 #1	<b>North Reference:</b>	Grid
<b>Well:</b>	La Plata 34-7-34 #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Pilot Hole		
<b>Design:</b>	Plan #1		

<b>Project</b>	La Plata County CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Southern Zone		Using geodetic scale factor

<b>Site</b>	SEC 34-7-34 #1		
<b>Site Position:</b>		<b>Northing:</b>	1,179,575.80 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,385,725.21 usft
<b>Position Uncertainty:</b>	1.0 ft	<b>Slot Radius:</b>	6-1/8 "
		<b>Latitude:</b>	37° 8' 26.916 N
		<b>Longitude:</b>	107° 36' 26.928 W
		<b>Grid Convergence:</b>	-1.29 °

<b>Well</b>	La Plata 34-7-34 #1, FC Horizontal		
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>
<b>Position Uncertainty</b>	1.0 ft	<b>Wellhead Elevation:</b>	
		<b>Latitude:</b>	37° 8' 26.916 N
		<b>Longitude:</b>	107° 36' 26.928 W
		<b>Ground Level:</b>	6,726.0 ft

<b>Wellbore</b>	Pilot Hole				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2014	08/05/14	9.58	63.78	50,579

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	72.58

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,900.8	42.02	72.58	1,778.5	147.0	468.5	3.00	3.00	0.00	72.58	
3,302.7	42.02	72.58	2,820.0	428.0	1,364.0	0.00	0.00	0.00	0.00	LP 34-7-34 #1 FC T
3,714.0	42.02	72.58	3,125.5	510.4	1,626.7	0.00	0.00	0.00	0.00	LP 34-7-34 #1 BHL

<b>Database:</b>	EDM 5000.1 Old	<b>Local Co-ordinate Reference:</b>	Well La Plata 34-7-34 #1
<b>Company:</b>	Coleman Oil & Gas	<b>TVD Reference:</b>	DFE @ 6738.5ft (GL + 12.5')
<b>Project:</b>	La Plata County CO	<b>MD Reference:</b>	DFE @ 6738.5ft (GL + 12.5')
<b>Site:</b>	SEC 34-7-34 #1	<b>North Reference:</b>	Grid
<b>Well:</b>	La Plata 34-7-34 #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Pilot Hole		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	3.00	72.58	600.0	0.8	2.5	2.6	3.00	3.00	0.00
700.0	6.00	72.58	699.6	3.1	10.0	10.5	3.00	3.00	0.00
800.0	9.00	72.58	798.8	7.0	22.4	23.5	3.00	3.00	0.00
900.0	12.00	72.58	897.1	12.5	39.8	41.7	3.00	3.00	0.00
1,000.0	15.00	72.58	994.3	19.5	62.1	65.1	3.00	3.00	0.00
1,100.0	18.00	72.58	1,090.2	28.0	89.2	93.5	3.00	3.00	0.00
1,200.0	21.00	72.58	1,184.4	38.0	121.0	126.9	3.00	3.00	0.00
1,300.0	24.00	72.58	1,276.8	49.4	157.5	165.1	3.00	3.00	0.00
1,400.0	27.00	72.58	1,367.1	62.3	198.6	208.2	3.00	3.00	0.00
1,500.0	30.00	72.58	1,454.9	76.6	244.1	255.9	3.00	3.00	0.00
1,600.0	33.00	72.58	1,540.2	92.2	294.0	308.1	3.00	3.00	0.00
1,700.0	36.00	72.58	1,622.6	109.2	348.0	364.8	3.00	3.00	0.00
1,800.0	39.00	72.58	1,701.9	127.4	406.1	425.6	3.00	3.00	0.00
1,900.8	42.02	72.58	1,778.5	147.0	468.5	491.1	3.00	3.00	0.00
2,000.0	42.02	72.58	1,852.2	166.9	531.9	557.5	0.00	0.00	0.00
2,100.0	42.02	72.58	1,926.5	187.0	595.8	624.4	0.00	0.00	0.00
2,200.0	42.02	72.58	2,000.8	207.0	659.7	691.4	0.00	0.00	0.00
2,300.0	42.02	72.58	2,075.1	227.0	723.5	758.3	0.00	0.00	0.00
2,400.0	42.02	72.58	2,149.4	247.1	787.4	825.3	0.00	0.00	0.00
2,500.0	42.02	72.58	2,223.7	267.1	851.3	892.2	0.00	0.00	0.00
2,600.0	42.02	72.58	2,298.0	287.2	915.2	959.2	0.00	0.00	0.00
2,700.0	42.02	72.58	2,372.3	307.2	979.0	1,026.1	0.00	0.00	0.00
2,800.0	42.02	72.58	2,446.5	327.2	1,042.9	1,093.0	0.00	0.00	0.00
2,900.0	42.02	72.58	2,520.8	347.3	1,106.8	1,160.0	0.00	0.00	0.00
3,000.0	42.02	72.58	2,595.1	367.3	1,170.7	1,226.9	0.00	0.00	0.00
3,100.0	42.02	72.58	2,669.4	387.4	1,234.5	1,293.9	0.00	0.00	0.00
3,200.0	42.02	72.58	2,743.7	407.4	1,298.4	1,360.8	0.00	0.00	0.00
3,302.7	42.02	72.58	2,820.0	428.0	1,364.0	1,429.6	0.00	0.00	0.00
LP 34-7-34 #1 FC TGT (660 FWL,FSL)									
3,400.0	42.02	72.58	2,892.3	447.5	1,426.1	1,494.7	0.00	0.00	0.00
3,500.0	42.02	72.58	2,966.6	467.5	1,490.0	1,561.6	0.00	0.00	0.00
3,600.0	42.02	72.58	3,040.8	487.6	1,553.9	1,628.6	0.00	0.00	0.00
3,700.0	42.02	72.58	3,115.1	507.6	1,617.8	1,695.5	0.00	0.00	0.00
3,714.0	42.02	72.58	3,125.5	510.4	1,626.7	1,704.9	0.00	0.00	0.00
LP 34-7-34 #1 BHL (742 FSL, 923 FWL)									



<b>Database:</b>	EDM 5000.1 Old	<b>Local Co-ordinate Reference:</b>	Well La Plata 34-7-34 #1
<b>Company:</b>	Coleman Oil & Gas	<b>TVD Reference:</b>	DFE @ 6738.5ft (GL + 12.5')
<b>Project:</b>	La Plata County CO	<b>MD Reference:</b>	DFE @ 6738.5ft (GL + 12.5')
<b>Site:</b>	SEC 34-7-34 #1	<b>North Reference:</b>	Grid
<b>Well:</b>	La Plata 34-7-34 #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Pilot Hole		
<b>Design:</b>	Plan #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
LP 34-7-34 #1 FC TG	0.00	0.00	2,820.0	428.0	1,364.0	1,180,003.81	2,387,089.23	37° 8' 31.450 N	107° 36' 10.206 W
- plan hits target center									
- Point									
LP 34-7-34 #1 BHL (7	0.00	360.00	3,125.5	510.4	1,626.7	1,180,086.23	2,387,351.90	37° 8' 32.324 N	107° 36' 6.985 W
- plan hits target center									
- Circle (radius 100.0)									

## **Coleman Oil & Gas, Inc.**

**Coleman La Plata 34-7 34 #1 Well**

**Lease # 14-20-151-54**

**232' FSL x 704'**

**SE/4SE/4-Section 33, T-34-N, R-7W N.M.P.M.**

**La Plata Co., CO**

### **SURFACE USE PLAN**

#### **A. Existing Roads: (see attached Survey Plat A)**

The entrance to the lease road is a graveled road being approximately 20 feet wide. The distance along this existing access road is 50 feet in length, more or less, to the point of intersection with the proposed new access road 140.94 feet in length (see New Access Road below). Access to the lease road is off of County Road 334. The existing access is located on lands owned by Lon Parmiter and a right of way has been secured with the private land owner.

The existing lease road described above, used to access the well, shall be properly maintained in the same or better condition than presently found. If necessary, additional base material and/or pulling of material from slopes back onto existing running surface to maintain crowning for off road drainage of precipitation run off will be done. Drainage turnouts or culverts will be installed along the existing access road where necessary.

Access: From the junction of Hwy 172 and Highway 151 in Ignacio, CO, travel East on State Hwy 151 for 0.5 miles. Turn left (North) on C.R. 521 for 0.3 miles. Go right (Northeast) on County Road 334 for 2.2 miles. Go left (North) on existing road for 50 feet.

#### **B. New Access Road: (See attached Survey Plat B)**

Per the attached survey and metes and bounds description found in Item B, a new access road with a sixteen (16) foot wide running surface using the 20 feet surveyed right of way width will be constructed beginning at the edge of the existing road, approximately 50 feet from its intersection with County Road 334. From that point the new road bears to the right (Northeast) following the flagged access for 140.9 feet to the staked well location. The 140.9 foot access is described by metes and bounds on the attached survey referred to as Item B1. This portion of new access is located on lands owned by Lon Parmiter and a right of way has been secured with the private land owner. The road will be constructed by hauling in 6 – 8 inches of 1 -3 inch road base and capped with 4 – 6 inches of ¾ inch road base. Compaction will be accomplished by rubber tired trucks and maintainer. Running surface will be crowned to drain precipitation run off to sides of road. Drainage will follow road shoulders to the existing access road. Drainage turnouts or culverts will be installed along new access where necessary. There will be soil and vegetation removal associated with this construction. Road base will come from the Gosney & Sons, Inc., La Boca quarry located in the NE/4 of Section 21, T32N, R7W, NMPM.

## **SURFACE USE PLAN**

### **Coleman La Plata 34-7 34 #1 Well**

Any necessary culverts or additional drainage diversions for the new access road will be installed pursuant to the attached Stormwater Management Plan guidelines.

**C. Location of Existing Wells**(see attached Plat C for details of existing gas well and water well locations and CDWR Well cards 1-32 for domestic wells within 1 mile radius)

**D. Location of Existing or Proposed Facilities:**(See attached survey plats, Plat D-1 – Pad Drawing and D-2 – Proposed Pipeline)

1.) The proposed well is to be located on a new well pad. The proposed facilities may consist of a wellhead, pumping unit with natural gas engine, production separator, meter house, two 500 barrel steel water tanks, wellhead compressor, pipeline riser, electric meter pole, cathodic protection rectifier, cathodic ground bed. All permanent equipment will be painted as required.

Any production equipment designed to contain fluids will be encompassed by a dirt berm, adequately fenced and properly maintained in order to safeguard wildlife and livestock.

2.) The pipeline will begin in the vicinity of the wellhead and tie-in to a new pipeline Southwest of the wellpad, a distance of 1464.29 ft x approximately 50' wide.

**E. Location and Type of Water Supply:**

Any water for the project will be obtained from the City of Ignacio. Water will be trucked to the site using the same roads described above. It is estimated that 5,000 barrels of water may be used during the drilling phase of the project and another 7,000 barrels of water used during completion. The total anticipated number of truck trips is approximately 75.

**F. Construction Materials:**

All of the construction materials for the proposed wellsite (fill dirt, road base, battery construction material(s), etc) will be obtained onsite or trucked from commercial facilities. three quarter inch road base may be installed on level pad surface if construction is done in monsoon season. The construction material for the new access road will be 1-3 inch road base with a 3 inch minus gravel cap hauled from the Gosney & Sons, Inc., La Boca quarry located in the NE/4 of Section 21, T32N, R7W, NMPM. The construction contractor for the well location, and road will be Gosney & Sons, Inc. The pipeline construction contractor has not yet been determined.

**G. Methods for Handling Waste:**

1.) The drilling operation will utilize a closed loop mud system with all make-up fluids and mud return cuttings and fluids contained in above ground steel pits. All drill cuttings and non-recycled drill fluids will be transported off site to approved commercial disposal facilities. Where possible, fluids will be recycled during the drilling operation.

**SURFACE USE PLAN**  
**Coleman La Plata 34-7 34 #1 Well**

- 2.) The completion and work-over operation(s) will also utilize steel tanks to capture, contain and control all return fluids until these fluids are transported off site to approved commercial disposal facilities. Where possible, fluids will be recycled during completion or work-over operations.
- 3.) All garbage and trash will be contained in a cage and hauled away by Coleman to an approved landfill.
- 4.) Chemical toilets will be provided and maintained during construction, drilling and completion operations.
- 5.) Prior to commencement of location leveling all brush or shrubs within the edge of disturbance area (E.D. on well pad drawing) will be pushed to the toe of the fill slopes on the north side of the location for erosion control during the drilling and completion phase. They will be pulled back onto the re-contoured slopes established during interim reclamation for erosion control.
- 6) Any tanks used to handle or store any material other than fresh water will be lined with a 24 mm liner and have berms.
- 7) Drilling Mud will be mixed on site in the steel mud tank. Fresh water will be mixed with dry additives to make up the drilling mud. The dry additives will be stored in pallets until used. The dry additives will be stored in the shrink wrap plastic until used. A plastic tarp will be placed over them and be securely fastened. Any drilling mud left after drilling the well will be disposed of at a properly licensed facility.
- 8) The completion fluid will utilize fresh water as a base material. The water will be stored in 400 bbl. frac tanks. Any fracturing additives will be pumped “on-the-fly” by the hydraulic fracturing company. The fracturing chemicals will be brought to the location by truck in either drums, “totes”, or in the case of any dry materials in bags stored on pallets. Any fracturing fluid chemical left after the treatment(s) will be removed by the hydraulic fracturing company and returned to their warehouse.

**H. Ancillary Facilities:**

Camper trailers will be on location for the company man, tool pusher, mud logger and drilling engineers during drilling and completion operations.

**I. Well Site Layout:(see Plat I-1 –Proposed Drilling Site Layout, Plat I-2 – Pad Cross Section Detail, and Plat I-3 – Visible Improvement Detail)**

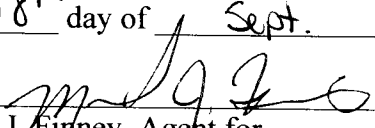
The attached drawing depicts the layout of the proposed well pad utilizing a closed loop mud/returns system during the drilling and completion operation phases. If the well is completed as a producer, production facilities will be constructed on location and the equipment will be painted as required.

**OPERATOR CERTIFICATION:**

I certify that I, or someone under my supervision, have inspected the drillsite and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

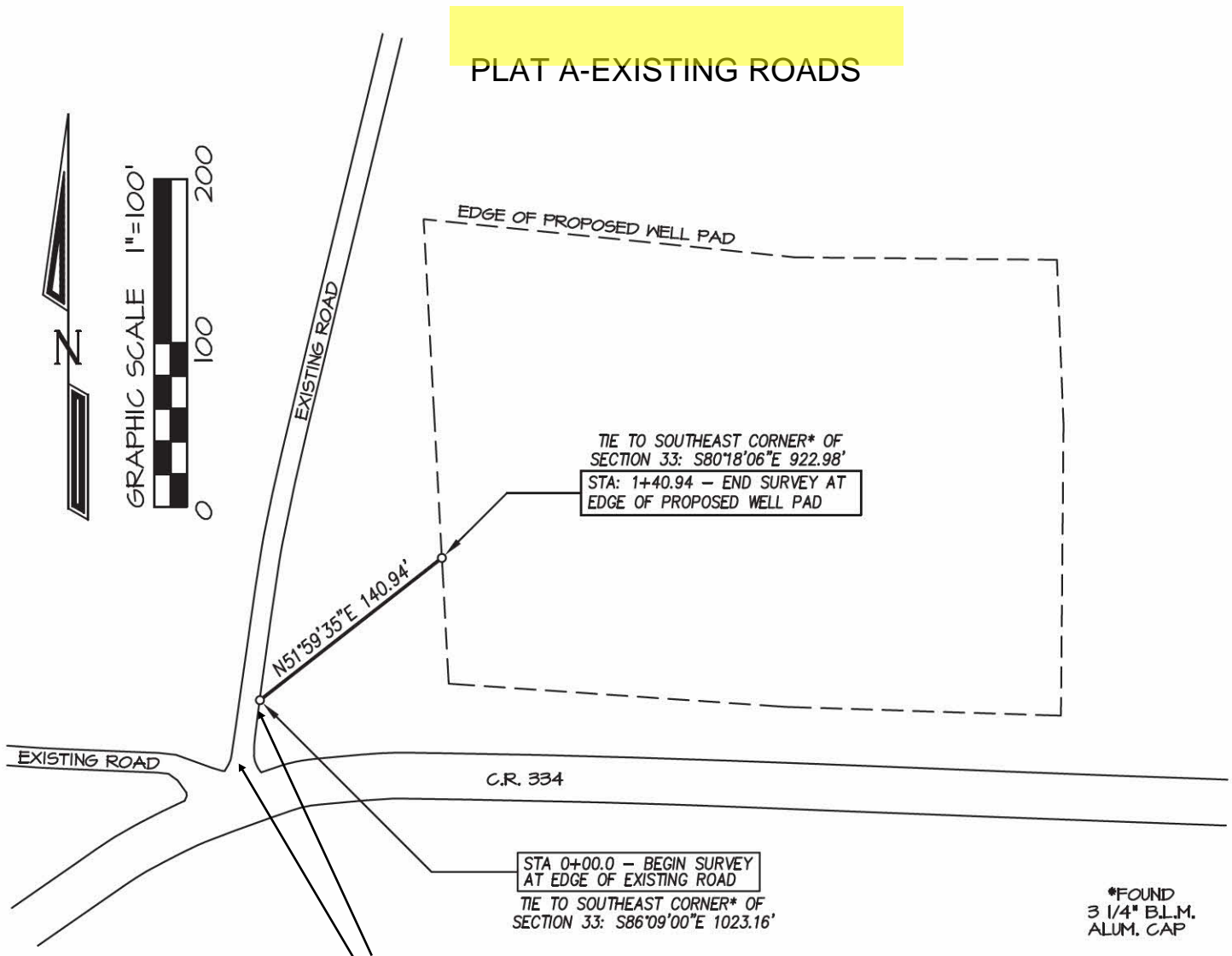
Executed this 18<sup>th</sup> day of Sept., 2014.

Name

  
Michael J. Finney, Agent for  
Coleman Oil & Gas, Inc.  
PO Box 2471  
Durango, Colorado 81302  
(970) 259-5691

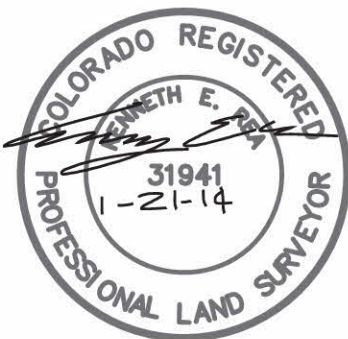
**COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1  
PROPOSED ACCESS ROAD LOCATED IN THE SE/4 SE/4 OF SECTION 33,  
T34N, R7W, N.M.P.M., S.U.L., LA PLATA COUNTY, COLORADO**

**PLAT A-EXISTING ROADS**



Existing Access-appx. 50' in length

OWNERSHIP	STATION	FEET/RODS
Lon Parmiter	0+00.0 TO 1+40.94	140.94 / 8.54



**BASIS OF BEARING:**

REAL-TIME KINEMATIC GPS SURVEY  
SOLUTION OF CO SOUTH STATE  
PLANE (NAD 83) COORDINATE GRID  
-NO ROTATION OR SCALE FACTOR APPLIED-

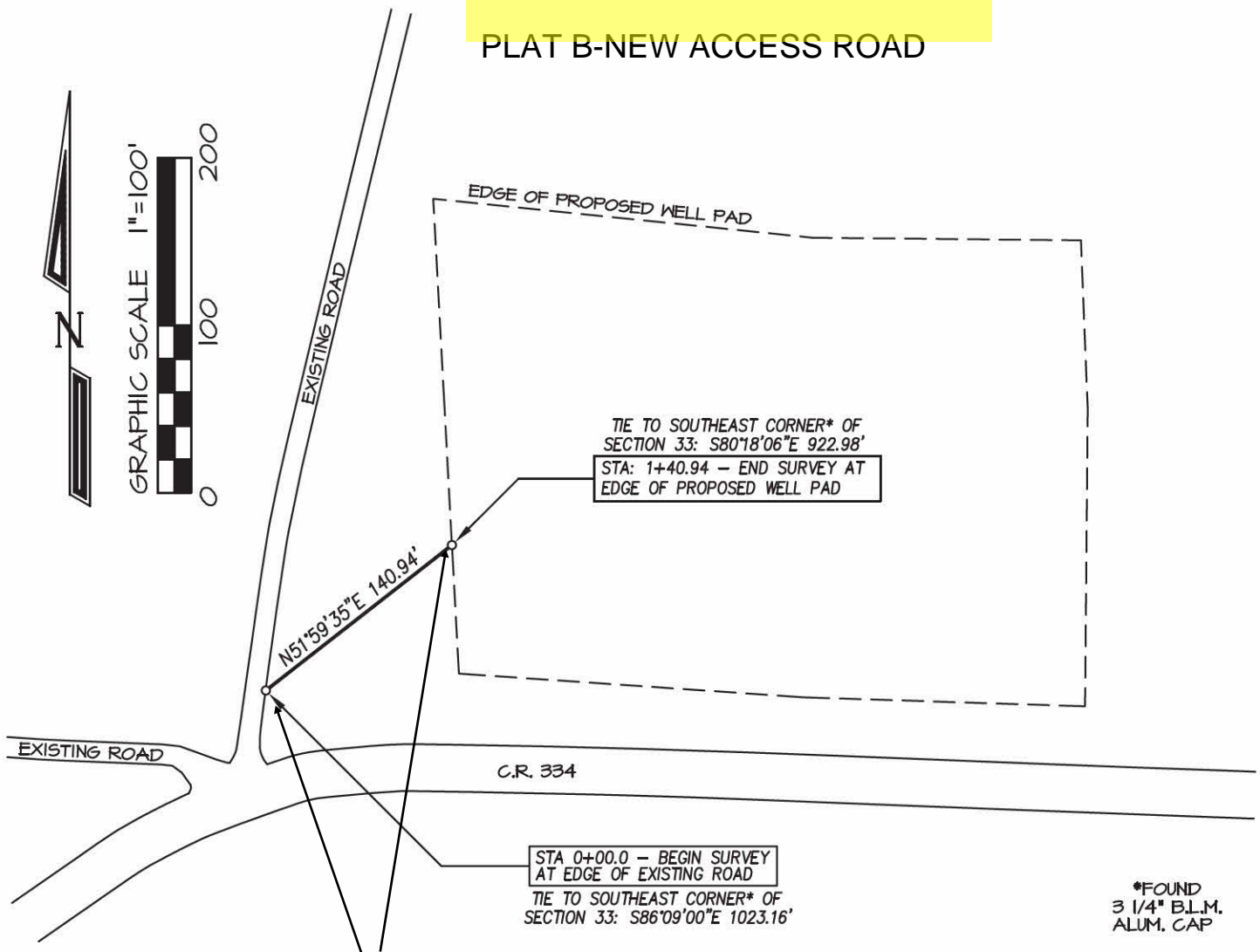
I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DRAWN BY: K.R.	CHECKED BY: K.R.	FILE NO.: CM002PL	SURVEYED: 9/27/13	DRAWN: 1/21/14	JOB NO.: CM002	PREPARED FOR:
						<b>COLEMAN OIL &amp; GAS, INC.</b>
						<b>NORTHSTAR</b> SURVEYING & MAPPING, INC. 768 County Rd. 308 DURANGO, CO. 81303 (970) 385-0851



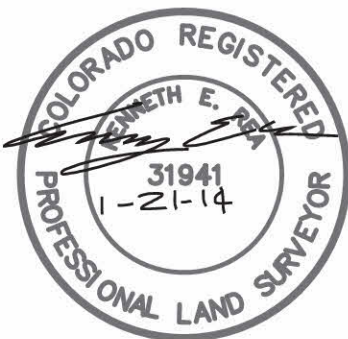
**COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1  
PROPOSED ACCESS ROAD LOCATED IN THE SE/4 SE/4 OF SECTION 33,  
T34N, R7W, N.M.P.M., S.U.L., LA PLATA COUNTY, COLORADO**

**PLAT B-NEW ACCESS ROAD**



New Access-140.94' in length

OWNERSHIP	STATION	FEET/RODS
Lon Parmiter	0+00.0 TO 1+40.94	140.94 / 8.54



**BASIS OF BEARING:**

REAL-TIME KINEMATIC GPS SURVEY  
SOLUTION OF CO SOUTH STATE  
PLANE (NAD 83) COORDINATE GRID  
-NO ROTATION OR SCALE FACTOR APPLIED-

I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DRAWN BY: K.R.	CHECKED BY: K.R.	FILE NO.: CM002PL	SURVEYED: 9/27/13	DRAWN: 1/21/14	JOB NO. CM002	PREPARED FOR:
						<b>COLEMAN OIL &amp; GAS, INC.</b>
						<b>NORTHSTAR</b> <b>SURVEYING &amp; MAPPING, INC.</b>  768 County Rd. 308 DURANGO, CO. 81303 (970) 385-0851

**COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1 - PROPOSED ACCESS**  
**LEGAL DESCRIPTION**

An access easement being twenty feet (20') wide, located in the SE/4 SE/4 of Section 33, T34N, R7W, S.U.L., N.M.P.M., La Plata County, Colorado.

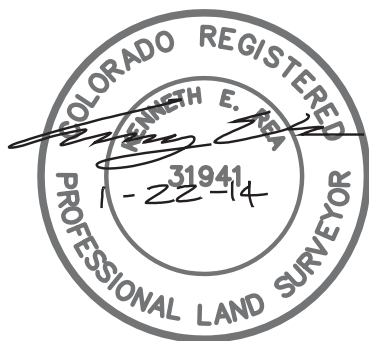
Said easement lying ten feet (10') on each side of the following described centerline:

Beginning at the edge of an existing road, whence the Southeast corner of said Section 33, being a 3-1/4" B.L.M. aluminum cap, bears S86°09'00"E a distance of 1023.16 feet.

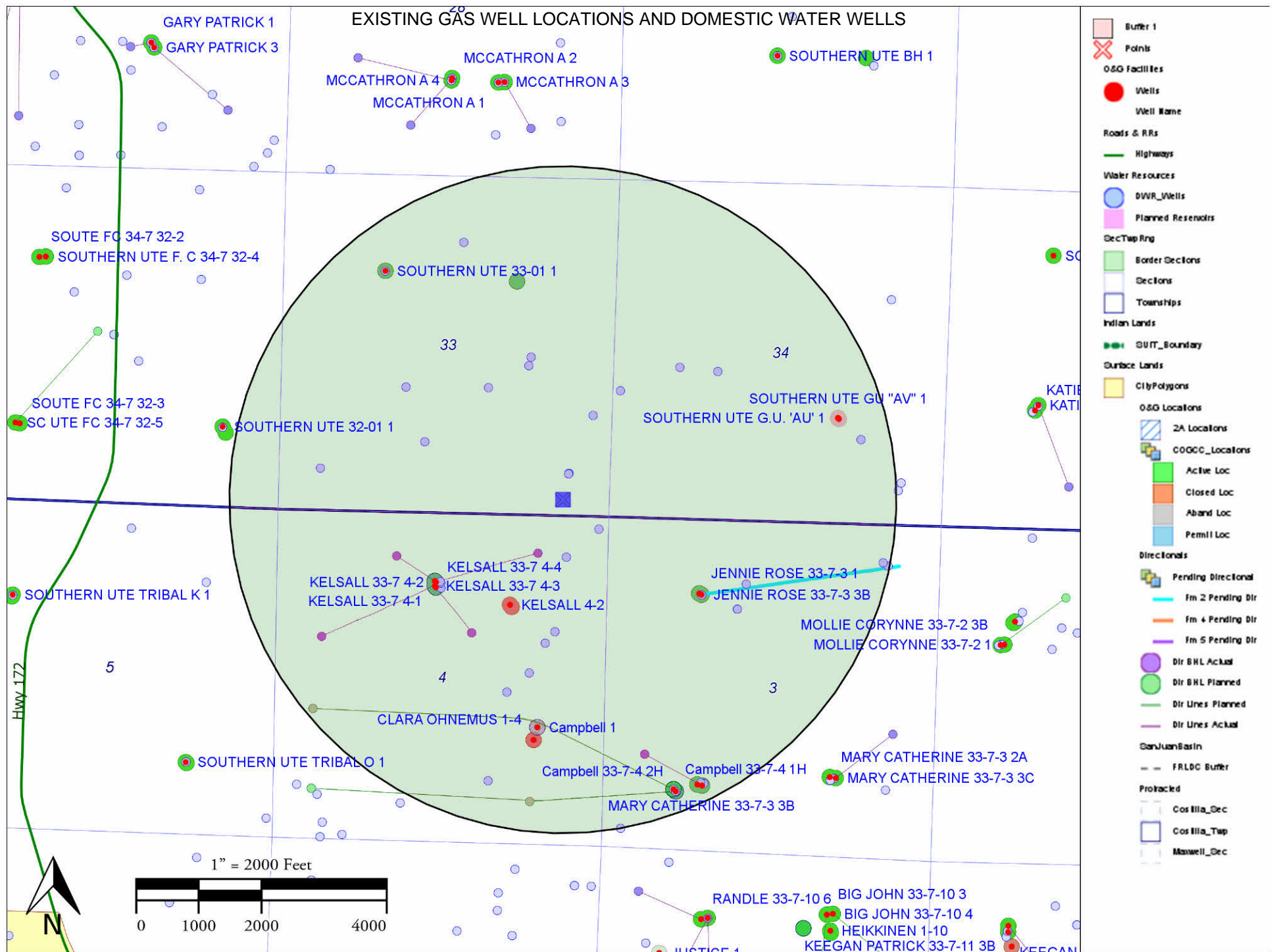
Thence N51°59'35"E a distance of 140.94 feet, ending at edge of Coleman Oil & Gas Inc. La Plata 34-7-34 #1 proposed well pad, whence said Southeast corner of Section 33 bears S80°18'06"E a distance of 922.98 feet.

Described easement being 140.94 feet in length & containing 0.065 acres, more or less.

PREPARED BY:  
KENNETH E. REA P.L.S. #31941



# Plat C - Proposed Coleman Oil & Gas La Plata 34-7 34 #1 Well





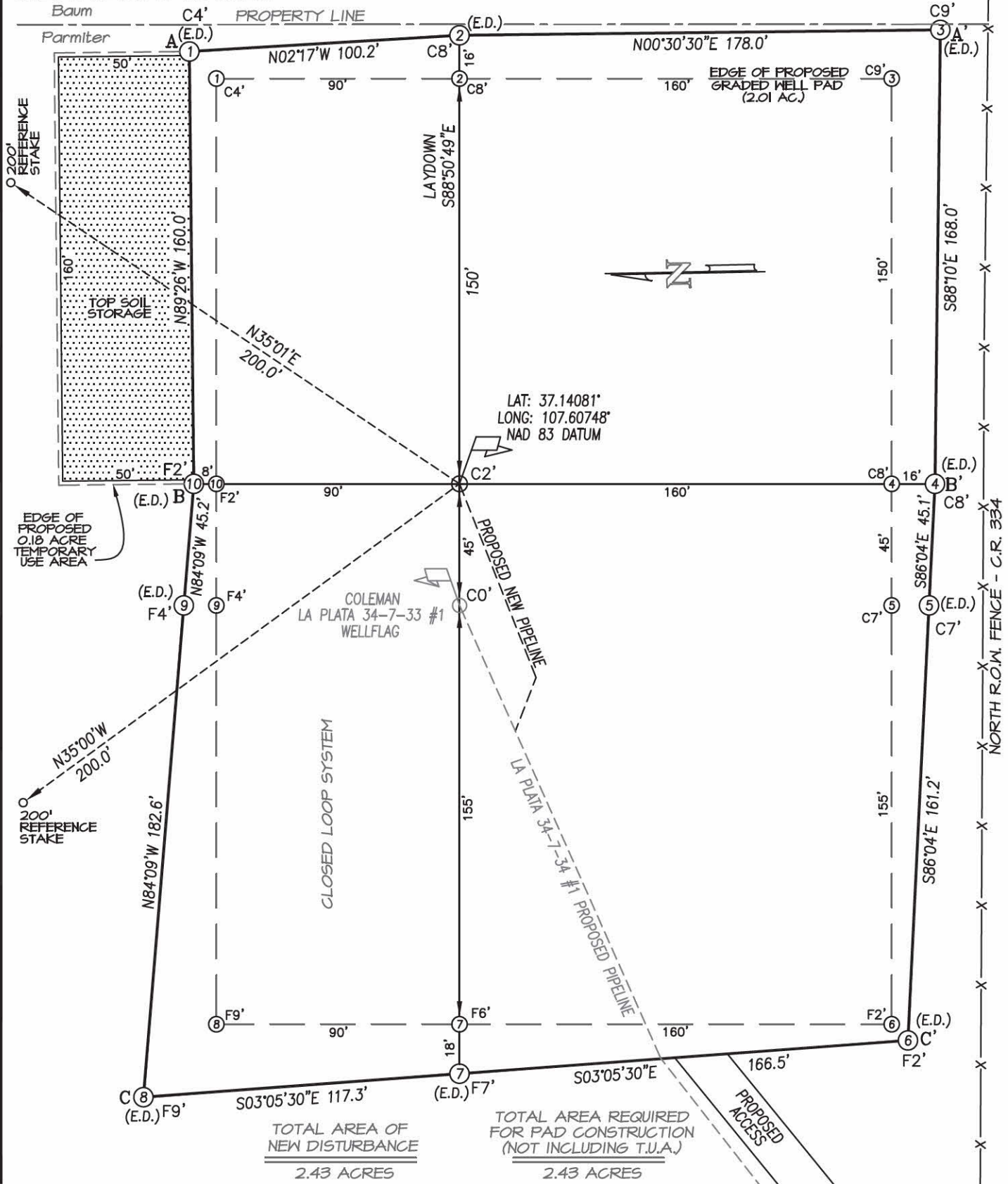
**COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1**  
**232' FSL, 704' FEL, SECTION 33, T-34-N, R-7-W, S.U.L., N.M.P.M.,**  
**LA PLATA COUNTY, CO. GROUND LEVEL ELEVATION: 6726'**

**PAD DRAWING**

**PLAT D-1**

(E.D.) DENOTES EDGE OF DISTURBANCE

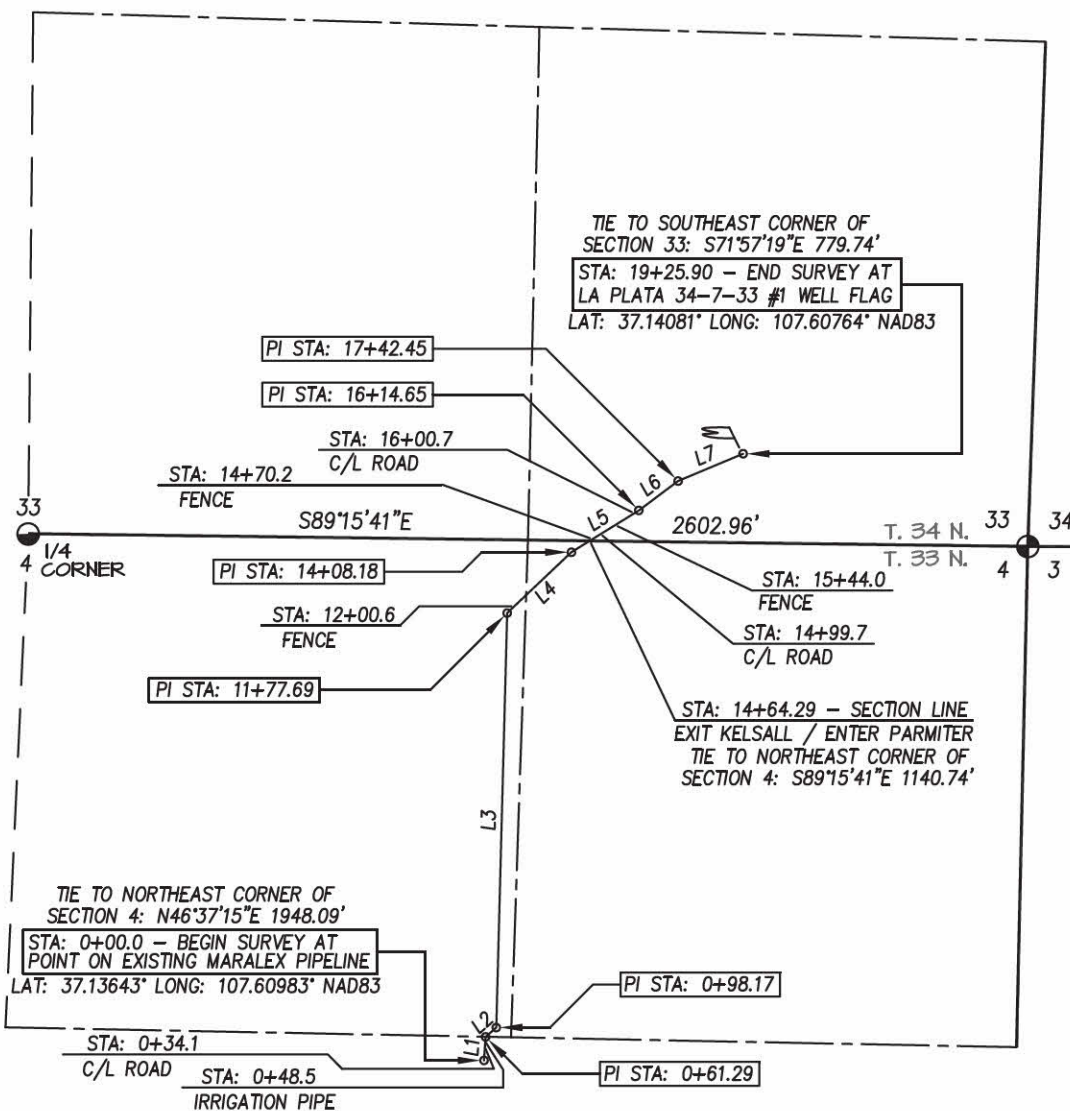
NOTE:  
 BEFORE ANY CONSTRUCTION BEGINS,  
 CONTRACTOR IS ADVISED TO CALL  
 ONE-CALL FOR LOCATION OF ANY  
 MARKED OR UNMARKED PIPELINES OR  
 CABLES IN THE AREA OF THIS PROJECT.



**MARALEX RESOURCES, INC.: 34-7 SECTION 33: SW/4 & 33-7 SECTION 4: N/2 GATHERING LINE  
PROPOSED PIPELINE LOCATED IN THE NW/4 OF SECTION 4, T33N, R7W,  
N.M.P.M., LA PLATA COUNTY, COLORADO, AND THE SE/4 SE/4 OF SECTION  
33, T34N, R7W, N.M.P.M., S.U.L., LA PLATA COUNTY, COLORADO**

**PLAT D-2 PROPOSED PIPELINE**

GRAPHIC SCALE 1"=500'



BASIS OF BEARING:  
REAL-TIME KINEMATIC GPS SURVEY  
SOLUTION OF CO SOUTH STATE  
PLANE (NAD 83) COORDINATE GRID  
- NO ROTATION OR SCALE FACTOR APPLIED -

OWNERSHIP	STATION	FEET/RODS
Samuel Kelsall IV	0+00.0 TO 14+64.29	1464.29 / 88.74
Lon Parmiter	14+64.29 TO 19+25.90	461.61 / 27.98

LINE TABLE		
LINE	BEARING	LENGTH
L1	N03°54'43"E	61.29'
L2	N48°36'12"E	36.88'
L3	N01°30'15"E	1079.52'
L4	N46°34'48"E	230.49'
L5	N58°10'48"E	206.47'
L6	N53°12'55"E	127.80'
L7	N67°13'23"E	183.45'

and denote found  
3-1/4" B.L.M. alum. cap  
unless otherwise noted.

NAME CHANGE: 8/19/14

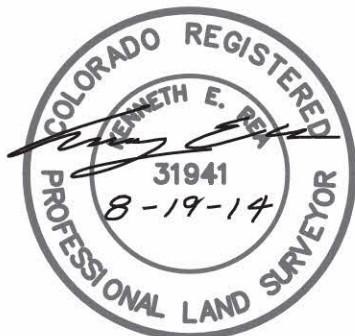
DRAWN BY: K.R. SURVEYED: 1/21/14  
CHECKED BY: K.R. DRAWN: 1/22/14  
FILE NO.: CM003PL JOB NO.: CM003

PREPARED FOR:

**MARALEX RESOURCES, INC.**

**NORTHSTAR  
SURVEYING & MAPPING, INC.**

768 County Rd. 308  
DURANGO, CO. 81303  
(970) 385-0851



I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

**MARALEX RESOURCES, INC.**  
**34-7 SECTION 33: SW/4 & 33-7 SECTION 4: N/2 GATHERING LINE**  
**LEGAL DESCRIPTION - Kelsall**

A pipeline easement being forty feet (40') wide, located in the NW/4 of Section 4, T33N, R7W, N.M.P.M., La Plata County, Colorado.  
Said easement lying twenty feet (20') on each side of the following described centerline:

Beginning at a point on an existing Maralex Resources, Inc. pipeline, whence the Northeast corner of said Section 4, being a 3-1/4" B.L.M. aluminum cap, bears N46°37'15"E a distance of 1948.09 feet.

Thence N03°54'43"E a distance of 61.29 feet,

Thence N48°36'12"E a distance of 36.88 feet,

Thence N01°30'15"E a distance of 1079.52 feet,

Thence N46°34'48"E a distance of 230.49 feet,

Thence N58°10'48"E a distance of 56.11 feet, to a point on the North line of the NW/4 of said Section 4, whence said Northeast corner of Section 4 bears S89°15'41"E a distance of 1140.74 feet.

Described easement being 1464.29 feet in length & containing 1.34 acres, more or less.

**PREPARED BY:**  
**KENNETH E. REA P.L.S. #31941**





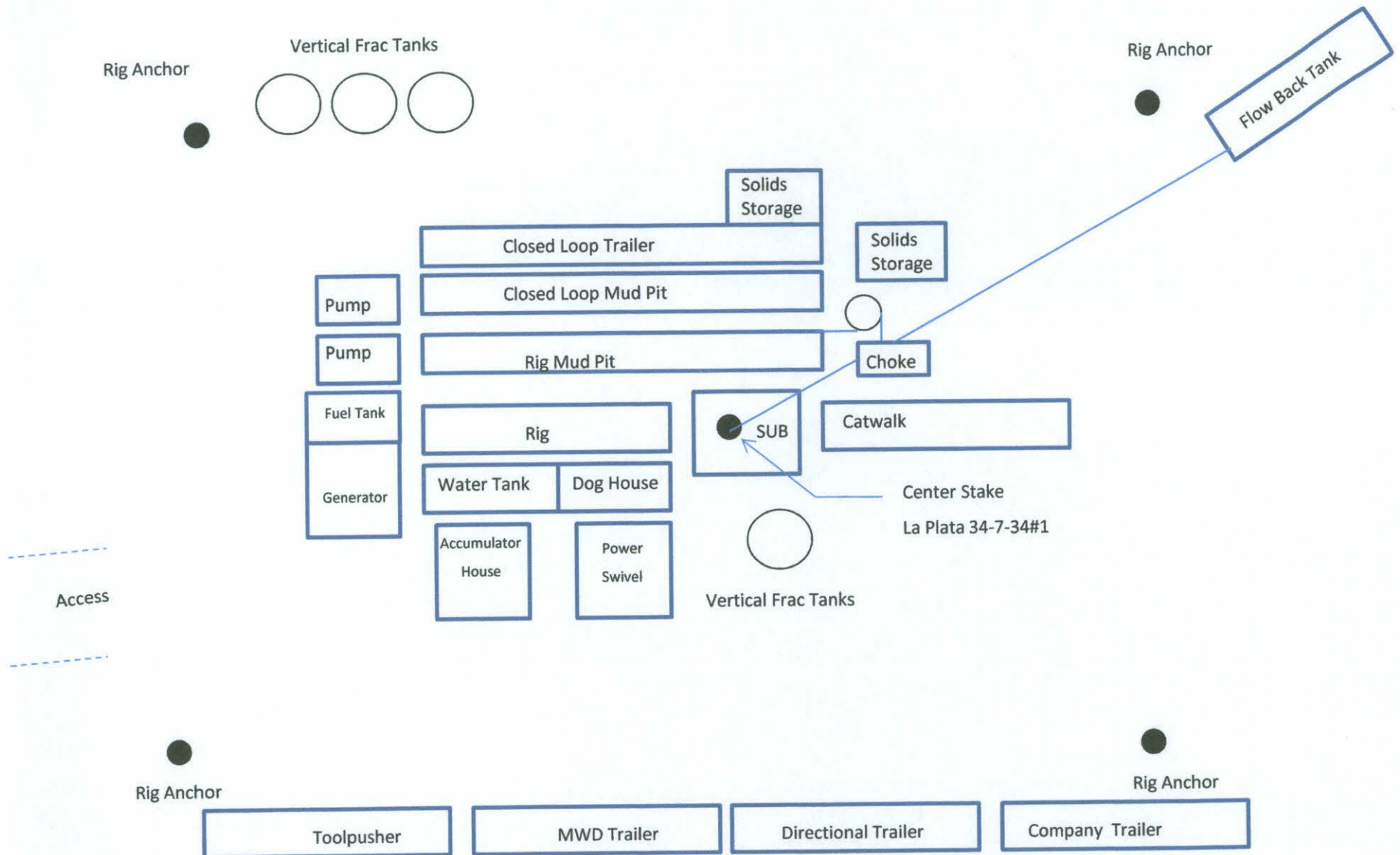
# Coleman Oil & Gas, Inc

La Plata 34-7-34#1

Proposed Drilling Site Layout

(Not to Scale)

Plat I-1



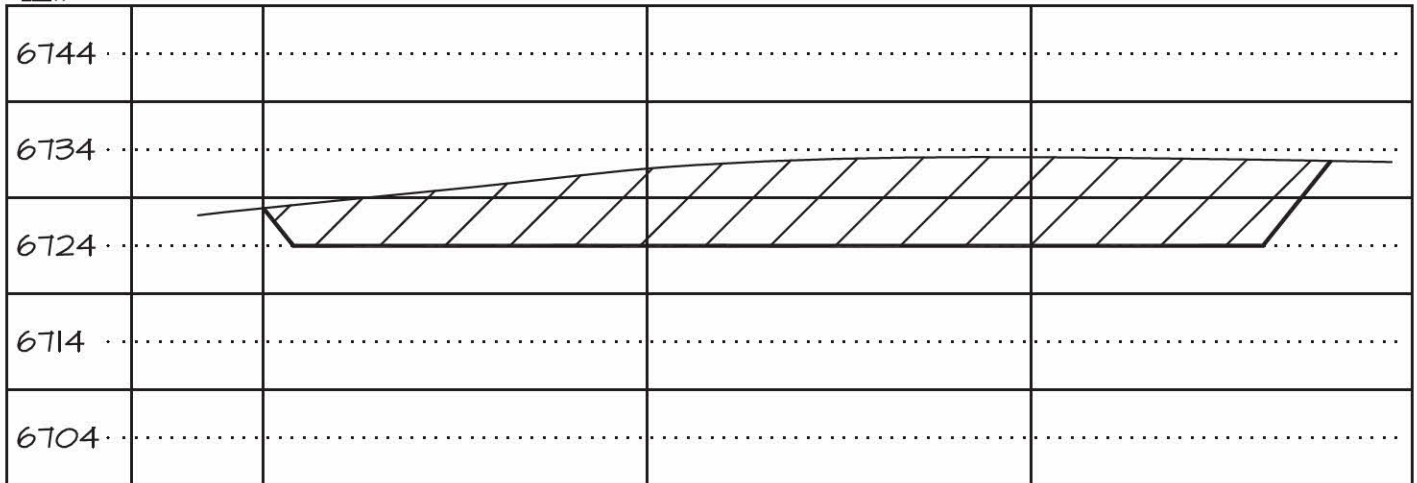
COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1  
 232' FSL, 704' FEL, SECTION 33, T-34-N, R-7-W, S.U.L., N.M.P.M.,  
 LA PLATA COUNTY, CO. GROUND LEVEL ELEVATION: 6726'

PAD CROSS SECTION DETAIL

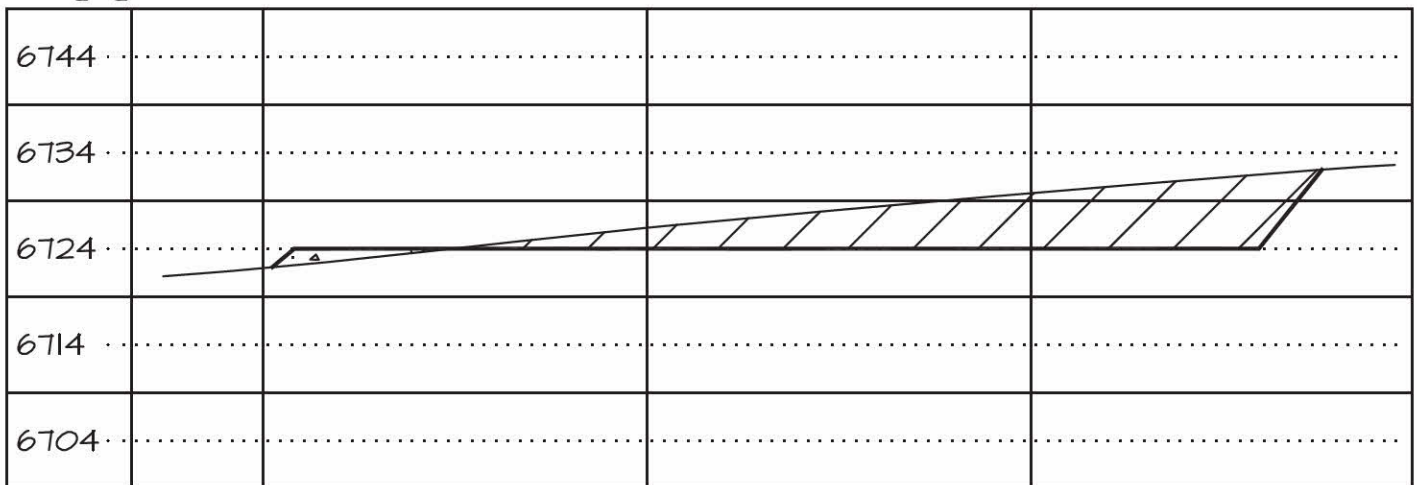
PLAT I-2

ELEV. A-A'

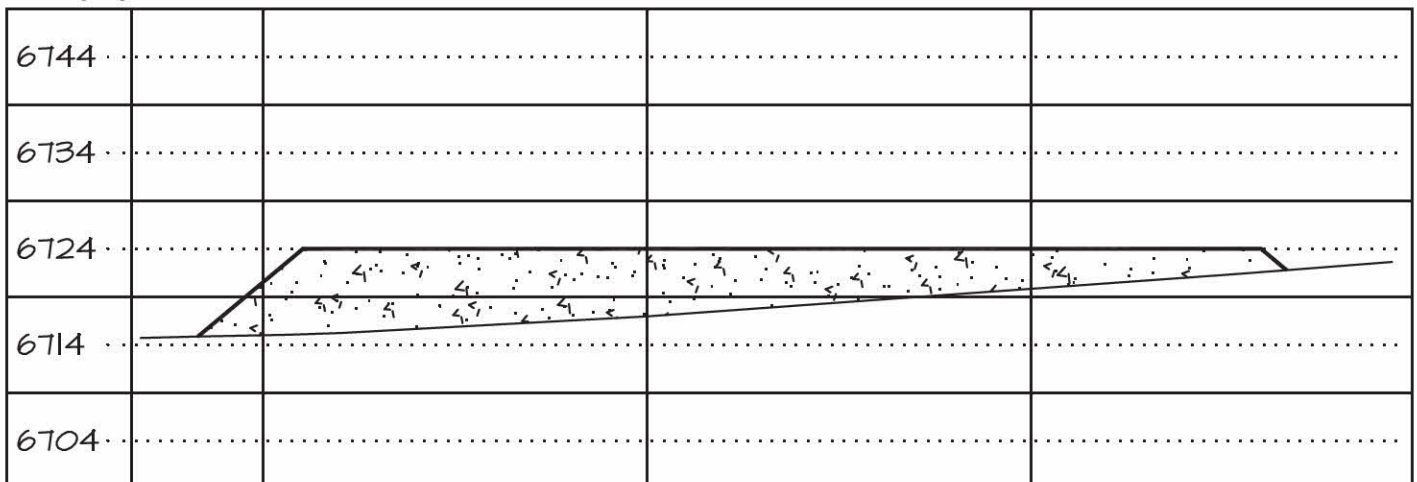
C/L



B-B'



C-C'



VERTICAL SCALE: 1" = 20' / HORIZONTAL SCALE: 1" = 50'

DATE DRAWN: 1/20/14

NORTHSTAR SURVEYING & MAPPING, INC.

FILE NO: CM002CFB

DRAWN BY: K.R.

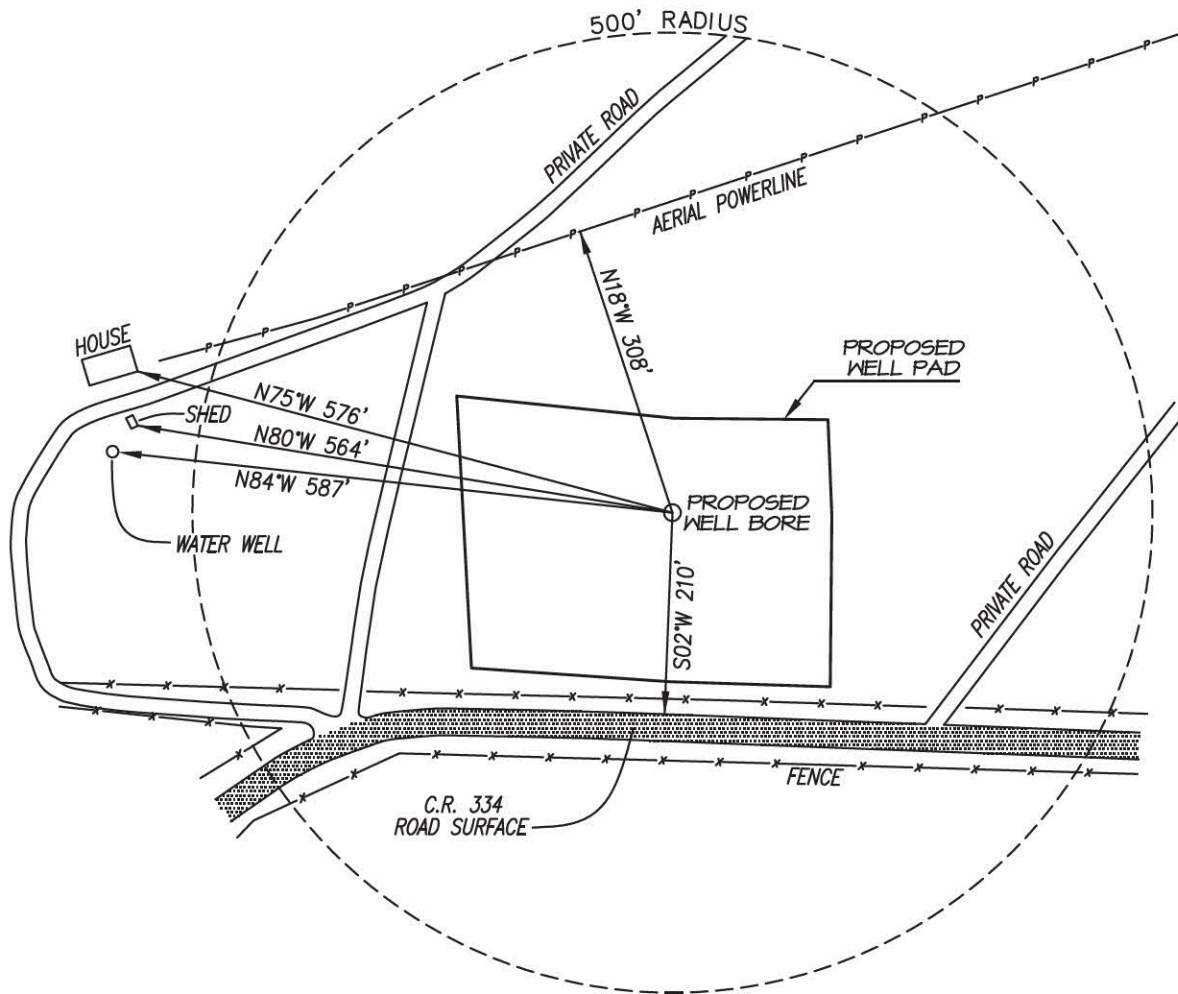
CHECKED BY: K.R.

COLEMAN OIL & GAS, INC.: LA PLATA 34-7-34 #1  
232' FSL, 704' FEL, SECTION 33, T-34-N, R-7-W, S.U.L., N.M.P.M.,  
LA PLATA COUNTY, CO. GROUND LEVEL ELEVATION: 6726'

500' RADUIS VISIBLE IMPROVEMENT DETAIL

PLAT I-3

SURFACE USE = DRY GRASSLAND



GRAPHIC SCALE 1"=200'



## SURFACE DAMAGE AGREEMENT & RELEASE

KNOW ALL MEN BY THESE PRESENTS:

That for and in consideration of the sum of Ten and More Dollars (\$10.00 +), paid to the undersigned by **Coleman Oil & Gas, Inc.**, (hereinafter called "Operator"), receipt of which is hereby acknowledged, **Lon Parmiter**, hereinafter called "OWNER") and their heirs, successors, and assigns, as the OWNER of the hereinafter described lands, do hereby release Operator, its successors, agents and employees from any and all claims for damages to the surface of the hereinafter described lands in La Plata County, Colorado, resulting from the ingress and egress, drilling, completion, operation, maintenance and/or abandonment of the La Plata 34-7-33 1 well and the La Plata 34-7-34 1 well, both situated upon and under the hereinafter described lands:

Township 34 North, Range 7 West, N.M.P.M.

Located in the S/2 of Section 33 and lying within the boundaries of Lot 1, VISTA DE LOS PINOS SUBDIVISION, according to the plat thereof filed for record November 8, 2007 as Reception No. 967399, in La Plata County, Colorado.

The well pad is to be located around the La Plata 34-7-33 1 wellhead located 232 feet from the South line and 749 feet from the East section line and the La Plata 34-7-34 1 wellhead located 232 feet from the South section line and 704 feet from the East section line.

Operator shall use only such portions of the described lands as are reasonably necessary; however, the surface area actually disturbed for the well pad shall not be more than 2.00 acres in size for drilling and completion operations. Operator shall have full and complete access to the original 2.00 acre well pad at all times for subsequent well operations.

OWNER further releases Operator, its successors, agents and employees from any and all claims for damages for loss of growing crops on the hereinafter described lands resulting directly or indirectly from the drilling, completion, operation, maintenance and/or abandonment of the well identified above.

The consideration paid hereunder shall also compensate the OWNER for damages sustained or which may be sustained, as a direct or indirect result of the construction, maintenance and subsequent use of the access road and production facilities necessary for Operator, its successors, agents, and employees to properly conduct operations and maintenance activities associated with the well identified above. Operator shall conduct its operations in a manner which will cause the least practical interference with OWNER's use of the leased lands.

Operator agrees to repair all fences, build gates and construct the access road and crossings in a manner which will allow OWNER to continue its use of the property in its current manner. Drainage areas or irrigation ditches will be re-constructed in a manner agreed to with OWNER. Upon completion of the well, the well pad shall be reduced in size to the minimum necessary to allow for normal production operations and the remainder of the well pad will be reclaimed. Reclamation shall consist of grading disturbed areas as closely as reasonably possible to pre-existing grade. Rig anchors may be left in place, if identified in a manner which will avoid damage to OWNER's equipment. Restoration shall conform to the Colorado Oil and Gas Conservation Commission (COGCC) rules and regulations. Operator shall maintain disturbed areas and facilities free of weeds.

Operator, in its discretion, may use synthetic liners for any pits utilized; however, Operator must bury said liners upon final reclamation of the site.

Operator will comply with COGCC Rules concerning Noise Abatement and shall install hospital grade mufflers, buried in series, sound walls, and/or other devices as necessary.

The consideration due hereunder shall be payable prior to the commencement of drilling operations on the subject lands.

Operator hereby agrees to indemnify and hold OWNER harmless from and against any and all expenses, losses or damages resulting from or relating to Operator's operation and maintenance of the well, equipment, road and related activities on the property, provided however Operator does not indemnify OWNER for expenses, losses or damages resulting from OWNER's conduct on the Property.

OWNER hereby waives the thirty (30) day notification prior to commencement of drilling operations as required by Rule 305.b of the COGCC rules and acknowledges that OWNER has received the brochure "Information for Oil and Gas Operators, Surface Owners and Surface Tenants" as per COGCC Rule 305.c(6),

*Please Return to:*  
FINNEY LAND CO  
P.O. Box 2471  
DURANGO, CO 81302

This Agreement shall be for as long as the above captioned well is operated by Operator, its successors and assigns, and for a period of one year after the abandonment of the well during which time Operator shall have the right to remove all facilities and other fixtures installed pursuant to this agreement. Upon abandonment of the well, Operator agrees to restore the surface of the lands to a closely as is reasonably possible to it's condition prior to Operator's operations, in accordance with COGCC Rules.

Coleman's rights under this Agreement shall be in addition to, and shall not diminish, any and all rights under its Oil and Gas Leases covering all or any portion of the Subject Property. The terms of this written Agreement shall constitute the full agreement between the parties hereto and no modification or amendment of this Agreement shall be effective unless made in writing and signed by the parties.

Owner expressly acknowledges that this Agreement satisfies the obligations and requirements of Coleman pursuant to Colorado Oil and Gas Conservation Commission rules and regulations to consult in good faith with Owner regarding proposed oil and gas operations on the Land. Owner expressly acknowledges that this Agreement shall be deemed to be specifically applicable to, and to satisfy fully, the obligation of Coleman to accommodate the Owner's use of the surface of the Land, existing and future, and Owner waives any statutory or common law claims to the contrary including, but not limited to, any claims pursuant to Colorado Revised Statutes § 34-60-127.

IN WITNESS WHEREOF, this Release is voluntarily entered into and executed this 13th, day of June, 2013.

OWNER:

[Signature]  
Lon Parmiter

OPERATOR:

Coleman Oil & Gas, Inc.

BY:

[Signature]  
Michael J. Finney  
Agent for Coleman Oil & Gas, Inc.

NOTARY PUBLIC

STATE OF Colorado,  
COUNTY OF La Plata,<sup>ss</sup>

The foregoing instrument was acknowledged before me this 17 day of June, 2013, by  
Lon Parmiter

My Commission Expires:

9.20.2015

Witness my hand and official seal.

NOTARY PUBLIC

[Signature]  
Notary Public

HENESSEY HARRMANN  
NOTARY PUBLIC  
STATE OF COLORADO

My Commission Expires 09/20/2015

STATE OF Colorado,  
COUNTY OF La Plata,<sup>ss</sup>

The foregoing instrument was acknowledged before me this 17 day of June, 2013,  
by Michael J. Finney

My Commission expires:

11/9/18

Witness my hand and official seal.

[Signature]  
Notary Public

WENDY L. COX  
NOTARY PUBLIC  
STATE OF COLORADO  
NOTARY ID #19984031235  
My Commission Expires November 9, 2018

# Vista de Los Pinos Subdivision

Located in the Sections 33 & 34

Township 34 North, Range 7 West, N.M.P.M.

## Exhibit A

Attached to and made a part of that certain Surface Damage Agreement dated June 13, 2013  
by and between Lon Parmiter, Owner and Coleman Oil & Gas, Inc., Operator.

**CERTIFICATE OF OWNERS:**  
KNOW ALL MEN BY THESE PRESENTS:  
That HD Mountains, LLC, whose address is P.O. Box 1609, Artes, Colorado  
81111, being the legal and recent owners of the following described tract of land, to wit:  
A tract of land located in the Sections 33 and 34, Township 34 North, Range 7 West,  
N.M.P.M., La Plata County, Colorado, said tract being more particularly described as follows:

Beginning at the Center-South  $\frac{1}{4}$  corner of said Section 34;  
Thence N  $89^{\circ}47'15''$  W, 127.38 feet along the north line of the SE  $\frac{1}{4}$ SW  $\frac{1}{4}$  of said Section 34 to the  
Southwest  $\frac{1}{4}$  corner of said Section 34;  
Thence S  $01^{\circ}10'02''$  W, 129.46 feet along the west line of the SE  $\frac{1}{4}$ SW  $\frac{1}{4}$  of said Section 34 to the West  $\frac{1}{4}$   
corner corner to said Section 34 and Section 3, T.34 N., R.7 W., N.M.P.M.;  
Thence N  $89^{\circ}11'34''$  W, 120.17 feet along the south line of said Section 34 to the southwest corner of  
said Section 34;  
Thence S  $89^{\circ}42'39''$  W, 2604.27 feet along the south line of said Section 33 to the South  $\frac{1}{4}$  corner of said  
Section 33;  
Thence N  $37^{\circ}31'07''$  E, 121.40 feet along the southerly right of way of County Road 321;  
Thence along the arc of a tangent curve to the right with a delta angle of  $20^{\circ}01'15''$  and a radius of  
1761.48 feet for a distance of 861.48 feet, the long chord bears N  $51^{\circ}51'40''$  E, 852.90 feet along the  
southerly right of way of County Road 321;  
Thence N  $68^{\circ}32'25''$  E, 840.97 feet along the southerly right of way of County Road 321;  
Thence along the arc of a tangent curve to the left with a delta angle of  $7^{\circ}12'27''$  and a radius of  
2946.40 feet for a distance of 496.42 feet, the long chord bears N  $61^{\circ}16'01''$  E, 496.11 feet along the  
southerly right of way of County Road 321;  
Thence S  $89^{\circ}19'08''$  E, 616.47 feet along the southerly right of way of County Road 321;  
Thence N  $58^{\circ}19'54''$  E, 296.18 feet along the southerly right of way of County Road 321;  
Thence S  $89^{\circ}32'09''$  E, 2036.99 feet along the southerly right of way of County Road 321 to the north  
line of the SW  $\frac{1}{4}$  of said Section 34;  
Thence S  $89^{\circ}32'45''$  E, 1022.05 feet along the north line of the SW  $\frac{1}{4}$  of said Section 34 to the Center  $\frac{1}{4}$  of  
said Section 34;  
Thence S  $80^{\circ}46'07''$  W, 1341.09 feet along the east line of the SW  $\frac{1}{4}$  of said Section 34 to the point of  
beginning.

Contains 156.59 acres more or less.

### GENERAL DEDICATIONS:

1. The sixty (60) foot wide access and utility easements as shown hereon are hereby dedicated to the  
owners of Lots 1, 2, 3 and 4 public and private utility providers for the purpose of ingress and  
egress, installation, maintenance and operation of utilities, together with their related equipment.

### NOTES:

1. This property may be subject to the rights, easements and restrictions included in the title policy  
prepared by Colorado Land Title Company under policy number L-390071. Mountain Man  
Surveying is not responsible for research of recorded easements.

### DESCRIPTION OF MONUMENTS

- Denotes set  $\frac{1}{2}$ " x 24" rebar with a 1- $\frac{1}{2}$ "  
aluminum cap stamped "PLS 37000"
- Denotes found  $\frac{1}{2}$ " rebar with a 1- $\frac{1}{2}$ " aluminum  
cap stamped "LS 10007"
- Denotes found 2- $\frac{1}{2}$ " Southern Ute aluminum  
cap with 2- $\frac{1}{2}$ " metallic post
- Denotes found 2- $\frac{1}{2}$ " RLM aluminum cap on a  
2- $\frac{1}{2}$ " metallic post
- + Position for corner not found or set



Bearings based on the north line of the SE  $\frac{1}{4}$ SW  $\frac{1}{4}$  of  
Section 34, T.34 N., R.7 W., N.M.P.M. monument as  
shown hereon.  
Reference Bearing: N  $89^{\circ}47'15''$  W

A-38741118  
R-1761.48  
L-496.43  
Chord=496.11  
L.C.=496.11

LOT 1  
35.04 Acres

LOT 2  
40.01 Acres

LOT 3  
42.03 Acres

LOT 4  
39.50 Acres

THIS PLAT IS HEREBY EXECUTED BY THE FOLLOWING PARTIES:

HD Mountains, LLC:

By: *Craig Kampa*  
Craig Kampa, Manager

State of Colorado:

County of La Plata:

This plat was acknowledged before me by Craig Kampa, manager of HD Mountains, LLC.  
This 2<sup>nd</sup> day of August, 2013, for the aforementioned purposes.

My commission expires MY COMMISSION EXPIRES 12/17/2017

Notary: *Sandra B. Gladwater*

Sandra B. Gladwater  
Notary Public  
State of Colorado

### SURVEYOR'S STATEMENT

I hereby state that this survey and plat was prepared by me or under my direct responsibility,  
supervision and checking, and that, in my professional opinion, it is true and correct to the best  
of my knowledge, belief and information based on the standards of care of Professional Land  
Surveyors practicing in the State of Colorado.



Approximate location of well pad



STATE OF COLORADO } ss  
LA PLATA COUNTY } ss  
I hereby state that this instrument was  
filed for record at \_\_\_\_\_ M  
on 2-28-2013 and duly filed.  
Recorder's Number 2013-000000 Fee 15.00  
LINDA DALEY, Recorder  
By *Craig Kampa* Deputy

Mountain Man  
Surveying

120 East 2nd Ave. Suite 1A  
Durango, Co. 81301  
Phone: 970-385-1715  
Fax: 970-385-4012  
Cell: 970-946-1886

Vista de Los Pinos Subdivision

Located in Sections 33 & 34

Township 34 North, Range 7 West, N.M.P.M.

HD Mountains, LLC.

Prepared By: E.A.  
Checked By: E.A.  
Date: 11-4-2007

Scale: 1"=200'  
Project No.: 02243  
Page 1 of 1



## RIGHT-OF-WAY AGREEMENT

**THIS AGREEMENT** is made this the 20th day of August, 2014, between Lon Par miter (hereinafter "Grantor", whether one or more) and Maralex Resources, Inc., (hereinafter "Maralex"). The parties agree as follows:

1. **Grant of Right-of-Way:** For and in consideration of Ten dollars (\$10.00) and other good and valuable consideration, the Grantor agrees to grant unto Maralex a right-of-way to construct, maintain, inspect, operate, replace, change or remove one gas pipeline and one water pipeline in a single trench or other appurtenances, for the transportation of oil, gas, petroleum products and any products or derivatives of any of the foregoing, upon and along a route to be selected by Maralex and agreed upon by Grantor, in, on, over, or through the following described land of which Grantor warrants that Grantor is the owner in fee simple, situated in La Plata County, State of Colorado, and hereinafter further described as being that portion of:

Township 34 North Range 7 West, N.M.P.M.  
Section 33: SW/4SW/4

said pipeline easement being more particularly described in Exhibit "A" attached hereto and made a part hereof; together with the right of ingress and egress to and from said land for any and all purposes necessary and incident to the exercise by Maralex of the rights granted in this contract. Grantor shall have the right to use and enjoy the above described premises, provided, however, Grantor shall not exercise such use and enjoyment in a manner that will impair or interfere with the exercise by Maralex of any of the rights herein granted. Grantor agrees not to build, create, construct or permit to be built, created or constructed, any obstruction, building, lake, engineering works or other structure over or on the right-of-way herein granted.

2. **Construction Damage Reimbursement:** The sum of Ten (\$10.00) dollars and other valuable consideration shall be paid by Maralex to the Grantor for damage caused by the pipeline construction. This includes full payment for any and all damages to the land, growing crops and pasturage of Grantor resulting from the exercise of the rights herein granted during initial construction to the extent such construction is conducted in accordance with the agreement of the parties hereto. Maralex agrees to pay not less than one-half of the then current real estate sales market value of each surface acre or part thereof disturbed by Grantee's operations resulting from the reconstruction, removal, replacement or repair of such installation after its initial construction, except Maralex shall not be liable for damages resulting from keeping the right-of-way clean of trees, undergrowth, and brush to the extent Maralex deems necessary in the exercise of the rights herein granted.
3. **Location & Width:** The easement being granted herein shall be fifty feet (40') in width during construction, maintenance repair or replacement of the pipelines and twenty five feet (20') in width centered on the pipeline thereafter.
4. **Successors and Assigns:** The terms, conditions, and provisions of this agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors, assigns, and legal representatives. All rights herein granted may be released or assigned in whole or in part.
5. **Term:** The rights herein granted shall be possessed, continued, and enjoyed by Coleman, its successors and assigns, so long as the pipeline(s) and appurtenances constructed pursuant to the Agreement shall be operated by Maralex, its successors and assigns, and for a period of two years thereafter during which time Maralex shall have the right to remove all pipeline facilities and other fixtures installed pursuant to this agreement.
6. **Fencing, Road Repair & Re-seeding:** If a fence must be moved in order to lay the pipeline, Coleman agrees to restore the fence back to the same or better condition than it was in prior to moving it. Maralex agrees to re-seed any land disturbed by the construction of the pipeline. Costs incurred by Maralex for refencing or reseeded shall be in addition to the construction damage reimbursement provided for in paragraph 2.


Please Return to:  
FINNEY LAND CO  
P.O. BOX 2471  
DURANGO, CO 81302


7. **Entire Agreement:** The terms of this written Agreement shall constitute the full agreement between the Grantor and Maralex and no modification or amendment of this agreement shall be effective unless made in writing and signed by the parties.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written:

GRANTOR:

Maralex Resources, Inc.

BY:   
Lon Parmiter

BY:   
Michael J. Finney, Agent

NOTARY PUBLIC

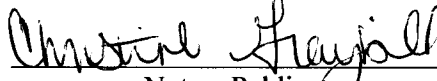
STATE OF )  
 )ss.  
COUNTY OF )

The foregoing instrument was acknowledged before me this 21 day of August, 2014, by Lon Parmiter.

My Commission Expires:

June 5, 2017

Witness my hand and official seal.

  
Notary Public

NOTARY PUBLIC

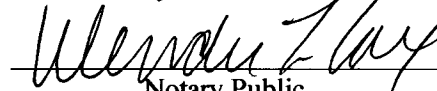
STATE OF Colorado )  
 )ss.  
COUNTY OF LaPlata )

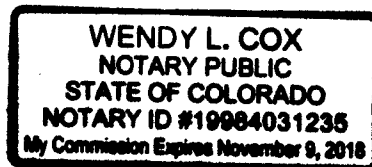
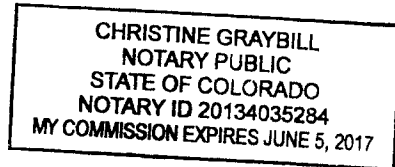
The foregoing instrument was acknowledged before me this 25 day of August, 2014, by

My Commission Expires:

11/9/18

Witness my hand and official seal.

  
Notary Public



Attached to and made a part of that certain Right-of-Way Agreement dated August 20, 2014 by and between Lon Parmiter (Grantor), and Maralex Resources, Inc. (Maralex).

**MARALEX RESOURCES, INC.: S4-7 SECTION 33; SW¼ & SE-7 SECTION 4; M2 GATHERING LINE PROPOSED PIPELINE LOCATED IN THE NW¼ OF SECTION 4, T33N, R7W, N.M.P.M., LA PLATA COUNTY, COLORADO, AND THE SW¼ SW¼ OF SECTION 33, T34N, R7W, N.M.P.M., S.U.L., LA PLATA COUNTY, COLORADO**

**GRAPHIC SCALE 1"=500'**

**BASIS OF BEARING:**  
REAL-TIME KINEMATIC GPS SURVEY SOLUTION OF CO SOUTH STATE PLANE (NAD 83) COORDINATE USED - NO ROTATION OR SCALE FACTOR APPLIED.

OWNER(SH)	STATION	FEET/RODS
Sonnet Merrill IV	0+00.0 TO H+64.24	H+64.24 / 88.74
Lori Parriner	H+64.24 TO H+254.0	489.61 / 27.70

LINE	BEARING	LENGTH
L1	N00°14'51"E	81.25'
L2	N48°30'22"E	20.85'
L3	N01°30'12"E	100.00'
L4	N03°34'45"E	230.44'
L5	N07°00'01"E	208.43'
L6	N63°22'00"E	137.00'
L7	N07°13'45"E	183.44'

② and ③ denote Found  
3-1/4" B.L.M. alum. cap  
unless otherwise noted.

**PURVED FOR:  
MARALEX RESOURCES, INC.**

**NORTHSTAR  
SURVEYING & MAPPING, INC.**

705 County Rd. 308  
Durango, CO. 81303  
(970) 385-0851

**I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.**

## RIGHT-OF-WAY AGREEMENT

**THIS AGREEMENT** is made this the 20th day of November, 2013, between **Kelsall Ignacio Properties LLC**, 1118 E. Missouri Ave., Ste. B-2, Phoenix, AZ 85014 (hereinafter "Grantor", whether one or more) and **Maralex Resources, Inc.**, PO Box 338, Ignacio, CO 81137, (hereinafter "Maralex"). The parties agree as follows:

1. **Grant of Right-of-Way:** For and in consideration of Ten dollars (\$10.00) and other good and valuable consideration, the Grantor agrees to grant unto Maralex a right-of-way to construct, maintain, inspect, operate, replace, change or remove one gas pipeline and one water pipeline and other appurtenances, fifty feet (50') in width, only during the construction, replacement, maintenance, and repair of the pipelines and twenty feet (20') in width centered on the pipeline thereafter, for the transportation of oil, gas, petroleum products and any products or derivatives of any of the foregoing, upon and along a route to be selected by Maralex and agreed upon by Grantor, in, on, over, or through the following described land of which Grantor warrants that Grantor is the owner in fee simple, situated in La Plata County, State of Colorado, and hereinafter further described to-wit:

Township 33 North Range 7 West, N.M.P.M.  
Section 4: W/2NE/4, that part of the NE/4NE/4  
North of County Road 334

said pipeline easement being more particularly described in Exhibit "A" attached hereto and made a part hereof; together with the right of ingress and egress to and from said land for any and all purposes necessary and incident to the exercise by Maralex of the rights granted in this contract. Maralex shall have the right to enter upon said land in order to repair the lines. Grantor shall have the right to use and enjoy the above described premises, provided, however, Grantor shall not exercise such use and enjoyment in a manner that will impair or interfere with the exercise by Maralex of any of the rights herein granted. Grantor agrees not to build, create, construct or permit to be built, created or constructed, any obstruction, building, lake, engineering works or other structure over or on the right-of-way herein granted.

2. **Construction Damage Reimbursement:** Consideration shall be paid before construction is commenced. This payment includes full and final payment for any and all damages to the land, growing crops and pasturage reseeding, timber, fences, buildings or other improvements of Grantor resulting from the exercise of the rights herein granted during construction and no other damages, rights or remedies shall be enforceable, collectible or available to the Grantor and Grantor hereby accepts said payment in full liquidated damages and waives the right to collect any further or additional damages in way arising or resulting from the exercise of the rights herein granted during the construction. Maralex agrees to pay not less than one-half of the then current real estate sales market value of each surface acre or part thereof disturbed by Grantee's operations resulting from the reconstruction, removal, replacement or repair of such installation after its initial construction, except Maralex shall not be liable for damages resulting from keeping the right-of-way clean of trees, undergrowth, and brush to the extent Maralex deems necessary in the exercise of the rights herein granted.
3. **Agreement Commencement:** The terms of this Agreement shall become effective upon payment of the consideration paid herein.

4. **Fencing & Re-seeding:** If a fence must be moved in order to lay the pipeline, Maralex agrees to restore the fence back to the same or better condition than it was in prior to moving it. Maralex agrees to re-seed any land disturbed by the construction of the pipeline. Maralex shall maintain the disturbed areas free of weeds.
5. **Successors and Assigns:** The terms, conditions, and provisions of this agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors, assigns, and legal representatives. All rights herein granted may be released or assigned in whole or in part.
6. **Term:** The rights herein granted shall be possessed, continued, and enjoyed by Maralex, its successors and assigns, so long as the pipeline(s) and appurtenances constructed pursuant to the Agreement shall be operated by Maralex, its successors and assigns, and for a period of two years thereafter during which time Maralex shall have the right to remove all pipeline facilities and other fixtures installed pursuant to this agreement.
7. **Entire Agreement:** The terms of this written Agreement and the Side Letter Agreement between the parties hereto shall constitute the full agreement between the Grantor and Maralex and no modification or amendment of this agreement shall be effective unless made in writing and signed by the parties.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written:

**GRANTOR:**

**Kelsall Ignacio Properties LLC**

**Maralex Resources, Inc.**

BY: \_\_\_\_\_

Samuel Kelsall IV, Manager

BY: \_\_\_\_\_

Michael J. Finney, Authorized Agent

**NOTARY PUBLIC**

STATE OF ARIZONA )  
 )ss.  
COUNTY OF MARICOPA )

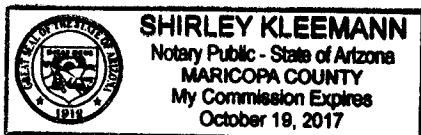
The foregoing instrument was acknowledged before me this 14th day of January, 2014, by Samuel Kelsall IV as Manager of Kelsall Ignacio Properties, Inc.

Witness my hand and official seal.

My Commission Expires:

October 19, 2017

Shirley Kleemann  
Notary Public



STATE OF COLORADO

NOTARY PUBLIC

)

)ss.

COUNTY OF LA PLATA

)

The foregoing instrument was acknowledged before me this 16<sup>th</sup> day of January, 2014, by Michael J. Finney, as Authorized Agent for Maralex Resources, Inc.

My Commission Expires:

11/9/14

Witness my hand and official seal.

Wendy L. Cox  
Notary Public

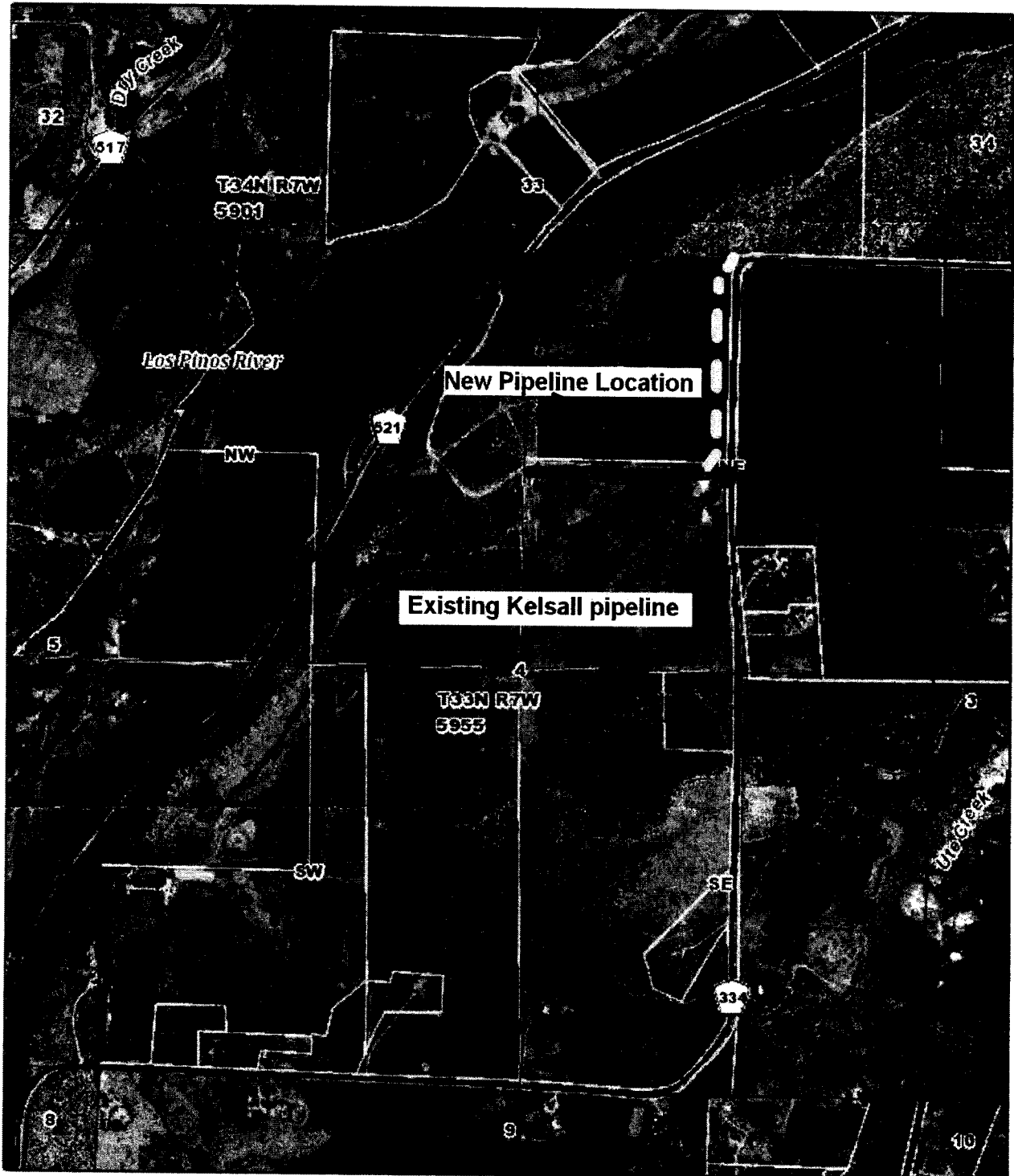




## "EXHIBIT A"

Attached to and made a part of that certain Right-of-Way Agreement dated November 20, 2013 by and between Kelsall Ignacio Properties LLC (Grantor), and Maralex Resources, Inc. (Maralex).

An easement for a pipeline right-of way across Grantor's property, approximately as shown below.



**ROAD USE AGREEMENT**

**THIS AGREEMENT** is made this 20th day of August, 2014, between Lon Parmiter (hereinafter "Grantor", whether one or more) the owner of the surface of the following described lands situated in La Plata County, State of Colorado, and hereinafter further described to-wit:

**Township 34 North, Range 7 West, N.M.P.M.**  
Section 33: SWW/4SW/4

and Coleman Oil & Gas, Inc.. (hereinafter referred to as "Coleman"). The parties agree as follows:

1. **Grant of Road Use:** Grantor hereby grants unto Coleman Oil & Gas, Inc. an easement for use of an existing road located on the above referenced property, approximately as shown by the dotted line lying within the boundaries of the described lands as shown on the attached Exhibit "A". The parties hereto shall cooperate with each other concerning the use of this easement. Grantor reserves the right to full use and enjoyment of the subject road except for the purposes herein granted, but such use shall not hinder, conflict, or interfere, directly or indirectly, with the exercise of Coleman's rights hereunder.
2. **Repair of Road:** Coleman agrees to be responsible for damages to the road caused by its operations as long as said road is being used by Coleman. Coleman further agrees to repair any damage that it does to the road so that it is in as good as condition as it was prior to the damage. Said work shall be done in a timely and workman like manner.
3. **Use of Road:** The use of this road shall be for access to facilities owned and operated by Coleman, located in the SW/4 of Section 33, Township 34 North, Range 7 West, N.M.P.M. Coleman will restrict its use of the road to normal business hours as much as possible, but has the right to use said road at any time if necessary.
4. **Successors and Assigns:** The terms, conditions, and provisions of this agreement shall be binding upon and inure to the benefit of the parties hereto, their successors, assigns, agents, employees, licensees, permittees, contractors, and subcontractors.
5. **Term:** The rights herein granted shall be possessed, continued, and enjoyed by Coleman, its successors and assigns.
6. **Entire Agreement:** The terms of this written agreement shall constitute the full agreement between the parties hereto and no modification or amendment of this Agreement shall be effective without the written consent of the parties being first obtained.


IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written:

GRANTOR:

  
Lon Parmiter

Coleman Oil & Gas, Inc., INC.

BY:

  
Michael J. Finney, as authorized  
Agent for Coleman Oil & Gas, Inc.

Please return to:  
FINNEY LAND CO  
P.O. BOX 2471  
DURANGO, CO 81302

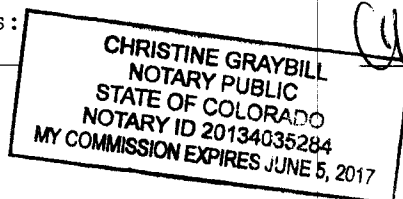
STATE OF Colorado }  
COUNTY OF LaPlata } ss.

NOTARY PUBLIC

The foregoing instrument was acknowledged before me this  
21 day of August, 2014, by Lon Parmiter

Witness my hand and official seal

My Commission Expires:  
June 5, 2017



Christine Graybill  
Notary Public

STATE OF Colorado }  
COUNTY OF LaPlata } ss.

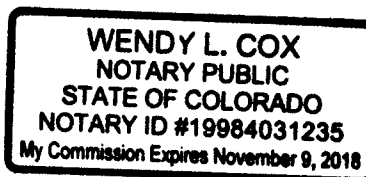
NOTARY PUBLIC

The foregoing instrument was acknowledged before me this  
25 day of August, 2014, by Michael J. Finney

Witness my hand and official seal

My Commission Expires:  
11/9/18

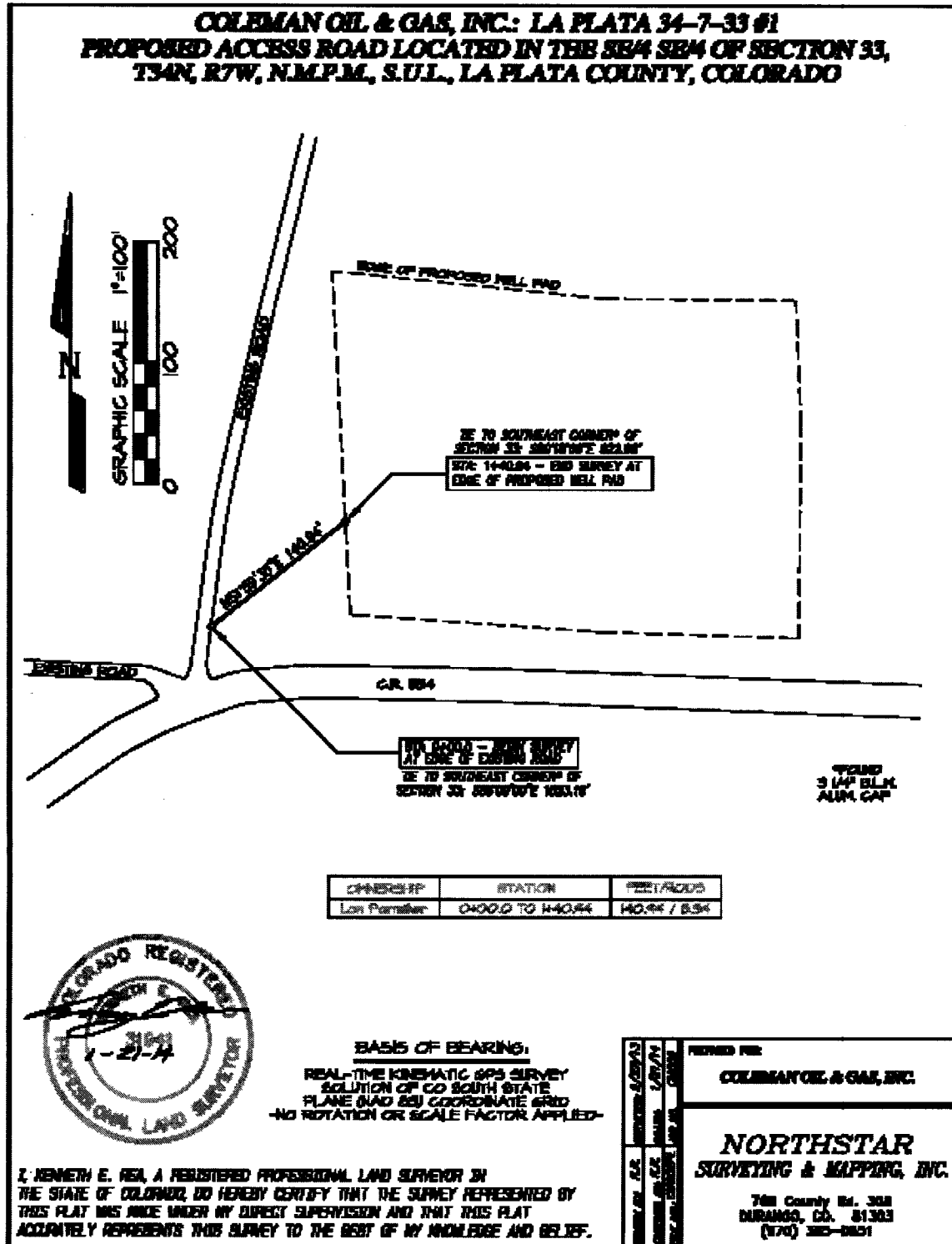
Wendy L. Cox  
Notary Public



**EXHIBIT "A"**

Attached to and made a part of that certain Road Use Agreement dated August 20, 2014 by and between Lon Parmiter (Grantor), and Coleman Oil & Gas, Inc. (Coleman).

An easement for use of an existing road and for construction of a new road located on Grantors' property, approximately as shown by the dotted line lying within the boundaries of the described lands as shown below:



## CORRECTION OF DESCRIPTION OF ROAD USE AGREEMENT

**WHEREAS**, I the undersigned, as **Grantor**, did under date of August 20, 2014, make and execute unto **Coleman Oil & Gas, Inc.** as **Operator**, a certain **ROAD USE AGREEMENT**, covering certain lands owned by me, situated in **La Plata** County, State of **Colorado**, which were described in said **ROAD USE AGREEMENT** as follows, to-wit:

**Township 34 North, Range 7 West**  
**Section 33: SW/4SW/4**

This **ROAD USE AGREEMENT** was filed for record with the Clerk and Recorder of in La Plata County, Colorado on August 29, 2014 under Reception No. 1085853 in said County and State.

**AND WHEREAS**, the parties desire to amend legal description of this Road Use Agreement as follows:

**Township 34 North, Range 7 West**  
**Section 33: SE/4SE/4**

**NOW, THEREFORE**, in consideration of the premises, and for the purpose herein stated, I, Lon Parmiter, do hereby declare that it is my intention to amend said **ROAD USE AGREEMENT** as aforesaid, and to ratify and adopt the same as so amended.

WITNESS my hand and seal this 17 day of September, A. D. 2014.

CHRISTINE GRAYBILL  
NOTARY PUBLIC  
STATE OF COLORADO  
NOTARY ID 20134035284  
MY COMMISSION EXPIRES JUNE 5, 2017

Don Pammeter

## Lon Parmiter

## NOTARY

STATE OF COLORADO )  
 ) ss  
COUNTY OF LA PLATA )

The foregoing instrument was acknowledged before me this 17 day of September, 2014 by

Lon Parmiter

**My commission expires:**

WITNESS my hand and official seal this day.

Christine Graybill  
Notary Public

**Notary Public**

Please Return to  
FINNEY LAND CO  
P.O. Box 2471  
DURANGO, CO 81302

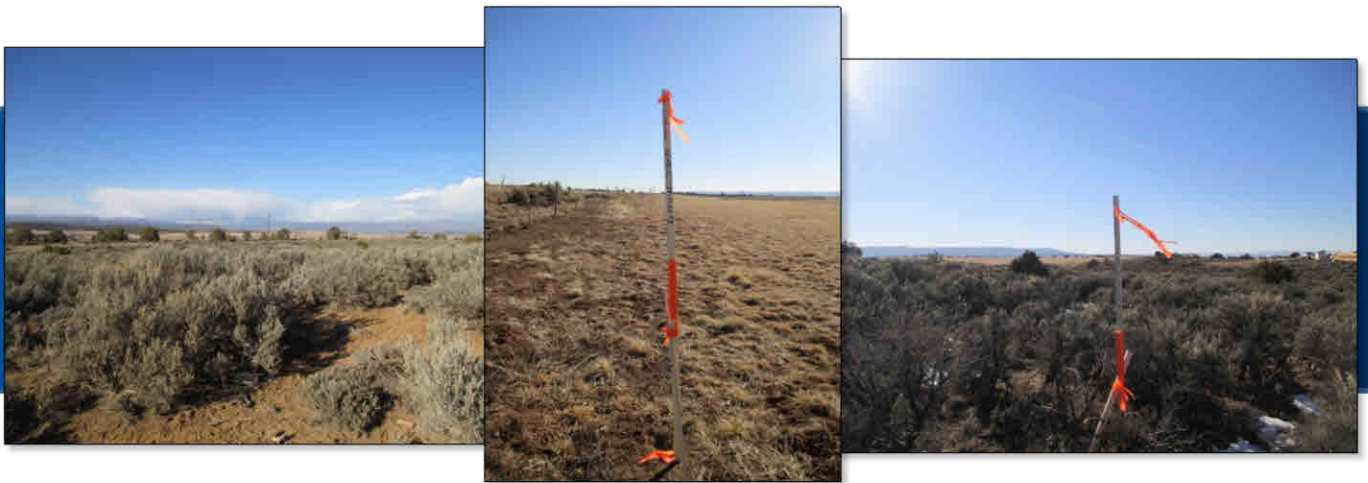
# **Coleman Oil and Gas, Inc. La Plata 34-7-33 #1 and La Plata 34-7-34 #1**

---

## **Stormwater Management Plan**

**Prepared for:**

**Coleman Oil and Gas, Inc.  
6540 East Main Street  
Farmington, NM 87499-3337**



Durango, CO  
Cortez, CO  
Pagosa Springs, CO  
Farmington, NM





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## ACRONYMS

BMP	best management practice
CDPHE	Colorado Department of Public Health and Environment
Coleman	Coleman Oil and Gas, Inc.
NRCS	Natural Resource Conservation Service
Project	La Plata 34-7-33 #1 and 34-7-34 #1 Well Pad, access road, and pipeline construction project
ROW	right-of-way
SWMP	Stormwater Management Plan

## 1. INTRODUCTION

---

Ecosphere Environmental Services was contracted by Coleman Oil and Gas, Inc. (Coleman) to prepare a Stormwater Management Plan (SWMP) for the twinned La Plata 34-7-33 #1 and 34-7-34 #1 Well Pad, access road, and pipeline construction project (Project).

The proposed Project would be situated on a mesa top, overlooking the Buck Highway and the Pine River to the northwest. The proposed well pad and pipeline would be located adjacent to La Plata County Road 334. The legal description for the proposed Project is as follows:

Section 33, Township 34 North, Range 7 West  
New Mexico Principal Meridian  
La Plata County, Colorado

The purpose of this SWMP is to identify possible contaminant sources that may contribute pollutants to stormwater and to identify best management practices (BMPs) that will reduce or eliminate any possible water quality impacts or stormwater discharges from the proposed Project. This SWMP will be implemented before Project construction begins and it will be updated as construction proceeds to reflect the current conditions and BMPs. This SWMP was written in accordance with all SWMP Guidance Protocols published by the Colorado Department of Public Health and Environment (CDPHE), as revised in April 2011.

## 2. SITE DESCRIPTION

---

### 2.1 Nature of the Construction Activity at the Site

Coleman has filed an application for permit to drill for the twinned La Plata 34-7-33 #1 and 34-7-34 #1 natural gas wells with private (fee) surface rights and Southern Ute Indian Tribe mineral rights. The proposed well pad would be approximately 350 feet by 250 feet, with an edge of disturbance that varies from 8 feet to 20 feet for a total of 2.25 acres. In addition, a temporary use area of 0.18 acre would be required on the northeast side of the well pad for top soil storage. Total disturbance associated with the twinned well pad would be 2.43 acres. To create a level well pad, there would be a maximum cut of 8 feet and a maximum fill of 9 feet. To access the proposed well pad, a new 140-foot access road within a 40-foot-wide right-of-way (ROW), approximately 0.13 acre, is proposed. If the proposed wells were productive, Coleman would construct a 1,925-foot pipeline within an existing 40-foot-wide ROW (1.77 acres of disturbance) that would parallel La Plata County Road 334. Total disturbance associated with the proposed Project would be approximately 4.33 acres, of which 2.56 acres would be new disturbance for the well pad and access road.



## 2.2 Proposed Sequence for Major Activities

The proposed Project will be constructed in summer 2014 and include the following activities:

- The well pad area would be cleared of vegetation and graded. Tree/shrub mulching or removal will be conducted by hand cutting, hydro-axe mulching, or blade removal.
- Approximately 140 feet of new access would be constructed within a 40-foot-wide ROW.
- A 1,925-foot pipeline ROW would be cleared and the pipeline trench excavated to an average depth of 4 feet. The pipeline would be placed in the trench then backfilled with at least 3 feet of soil cover. Coleman will leave a small soil berm (6 to 12 inches high) so the filled soil will eventually settle to a level grade.
- All areas not needed for production will be re-contoured to the original condition as possible and then prepared for reclamation.

Coleman uses a variety of heavy equipment throughout the construction process, including but not limited to: trenchers, backhoes, bulldozers, side booms, drill rigs, and graders.

## 2.3 Disturbance Estimates

The proposed Project would result in a short-term disturbance of 4.33 acres and a long-term disturbance of approximately 1 to 1.5 acres. Coleman would manage the access road, pipeline, and well pad for the life of the Project.

## 2.4 Soil Types

Information provided by the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) was reviewed to identify soils and the potential for erosion within the Project area. This soil information is listed in Table.

**Table 1. Soil units in Project area**

Soil Unit Name and Location	Potential for Wind Erosion	Potential for Water Erosion
Witt loam, 3 to 8 percent slopes (pipeline)	Moderate	Moderate

Source: NRCS 2014 –Web Soil Survey; <http://websoilsurvey.nrcs.usda.gov/app/>.

## 2.5 Vegetation Description and Cover

The proposed well pad and access road would be located in an undisturbed big sagebrush shrubland vegetation community. Dominant species include big sagebrush (*Artemisia tridentata*) and rubber rabbitbrush (*Ericameria nauseosa*). Approximately 20 to 30 immature piñon pine (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*) trees are located within the proposed well pad.

Canopy cover dominated by sagebrush was visually estimated at 50 percent. Understory vegetation accounted for approximately 20 percent cover and bare ground accounted for approximately 30 percent

cover. Understory species include crested wheatgrass (*Agropyron cristatum*), Indian ricegrass (*Achnatherum hymenoides*), redstem stork's bill (*Erodium cicutarium*), yucca (*Yucca angustissima*), and prickly pear (*Opuntia polyacantha*).

The proposed pipeline would be located in an active, irrigated agricultural field. Dominant species along the proposed pipeline during the January 23, 2014 site visit included crested wheatgrass and Indian ricegrass.

## 2.6 Potential Pollution Sources

Potential pollution sources at the construction site include dredged soil, dirt, slurry, solid waste, garbage, trash, chemical waste, rock, sand, sediment, construction related fluids (grease, oil, etc.), and drilling related fluids.

## 2.7 Non-Stormwater Discharge

No non-stormwater discharges are anticipated. No construction dewatering is anticipated.

Construction dewatering is only covered by this SWMP if discharge contacts the ground, is protected by BMPs, and is included on the BMPs maps in Appendix A. If construction dewatering discharges from the site as runoff or to surface waters, then a construction-dewatering permit would be obtained from the CDPHE.

## 2.8 Receiving Waters and Outfall Location

Drainage from the proposed Project site would generally flow west, through unnamed ephemeral channels that drain into the Pine River, located 0.5 mile west of the site. The Pine River is a tributary to the San Juan River located approximately 11 miles south, in New Mexico.

# 3. STORMWATER MANAGEMENT CONTROLS

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## 3.1 SWMP Administrator

The proposed Project will be constructed by Coleman. Coleman will be the Stormwater Construction Permit holder and responsible for implementing this SWMP, constructing and maintaining BMPs, and conducting and documenting stormwater inspections. Coleman will continue stormwater inspections until the Project site has reached final stabilization. The SWMP will be administered by:

Michael T. Hanson  
Coleman Oil and Gas, Inc.  
6540 East Main Street  
Farmington, NM 87499-3337  
Phone: 505-566-1996; Email: [mhanson@cog-fmn.com](mailto:mhanson@cog-fmn.com)

The SWMP Administrator is responsible for developing, implementing, maintaining, and revising the SWMP. The SWMP Administrator is the contact for all SWMP-related issues and is the person responsible for its accuracy, completeness, and implementation.

A copy of the CDPHE General Permit for Stormwater Discharges Associated with Construction Activity for this Project is located in Appendix B.

### 3.2 Identification of Potential Pollutant Sources

All potential pollutant sources (including materials and activities) at a site are evaluated for the possibility to contribute pollutants to stormwater discharges and these are identified in Table 2 for the proposed Project. The BMPs designed to mitigate potential sources of pollution are listed in Section 3.3.

**Table 2. Potential pollutants from the proposed Project**

Potential Pollutant	Project Potential?	Description of Activities	BMPs Selected to Control Source
All disturbed and stored soils	Yes	Construction of the well pad, pipeline, and access road will disturb soil; there will be soil stockpiles during certain operations.	Sections 3.3.1 and 3.3.2 of this SWMP list the BMPs that will be used to control runoff from disturbed and stored soils.
Vehicle tracking of sediments	Yes	The proposed access road is adjacent to La Plata County Road 334 where vehicle-tracking control will be necessary.	A tracking control pad will be installed to reduce vehicle tracking of sediments. Section 3.3.1 and 3.3.2 of this SWMP discuss the tracking control pad.
Removal of excess material	No	Soil removed from grading activities will be stockpiled and used for reclamation activities.	No excess soil would be removed.
Outdoor storage activities	Yes	Outdoor storage areas will be used during the construction.	Outdoor staging areas will be located within the existing disturbance area and covered under recommended BMPs in Sections 3.3.1 and 3.3.2 of this SWMP.
Vehicle and equipment maintenance and refueling	No	Vehicles and construction equipment will be refueled prior to arriving at the Project location.	No refueling will occur on-site.
Significant dust or particulate generating processes	Yes	Use of equipment during the dry season and driving along the primarily dirt roads.	Fugitive dust will be controlled during construction by reducing vehicle and equipment speeds on unpaved surfaces and by minimizing the amount of exposed soil.



Potential Pollutant	Project Potential?	Description of Activities	BMPs Selected to Control Source
Routine maintenance activities involving fertilizers, pesticides, detergents, etc.	Yes	The Project construction may require the use of herbicides to treat noxious weeds and other materials that are potentially harmful if spilled.	Material Safety Data Sheets will be maintained on-site for all potentially hazardous materials. Section 3.3.4 of this SWMP outlines the steps that will be taken in the case of an accidental spill.
On-site waste management practices	Yes	Solid waste and small amounts of garbage are anticipated to be generated during the proposed Project.	All waste will be collected, removed from the Project site, and properly disposed off-site in a permitted landfill.
Concrete truck/equipment washing	No	Concrete will not be required for the Project.	None.
Dedicated asphalt/concrete batch plants	No	No asphalt or concrete plants will be constructed on-site.	None.
Non-industrial waste sources	Yes	Construction of the well pad involves the clearing of brush and trees.	Brush piles generated during clearing operations will be lopped and scattered or chipped on-site, as approved by the landowner.
Other areas where spills could potentially occur	Yes	Construction of the well pad, access road, and pipeline will affect 4.33 acres. Spills can occur anywhere along the Project area or during truck traffic to and from the construction site.	Section 3.3.4 in this SWMP outlines the steps that will be taken if a spill occurs outside of the Project area.

### 3.3 BMPs for Stormwater Pollution Prevention

This SWMP describes BMPs that will be implemented to reduce the potential of pollution sources identified in Section 3.2. The installation, implementation, and required maintenance specifications for each BMP are listed in Appendix C. The SWMP will be modified to reflect BMPs currently in use.

The designated BMPs include erosion, sediment, and construction controls. Erosion control devices are used to limit the amount of erosion on-site. Sediment control devices are designated to capture sediment within the Project's disturbance boundary. Construction controls are related to Project construction access and staging. All BMPs are located on the BMP Site Maps in Appendix C.

#### 3.3.1 Structural Practices for Erosion and Sediment Control

Structural BMPs refer to physical structures designed to remove pollutants from stormwater runoff and reduce downstream erosion.

The proposed structural BMPs are described in Table 3 .The installation diagram and required maintenance specifications for each BMP is included in Appendix C. Each BMP will be installed according to the proper specifications provided in these diagrams and maintained according to the associated maintenance schedules during required stormwater inspections.

**Table 3. Structural BMPs recommended for the Project**

BMP	Description
Diversion Ditch	A gravel, stone, or soil berm or diversion is a temporary ridge that slows and filters flow and diverts stormwater from a slope.
Erosion Control Logs (wattles)	Erosion control logs are made of fibrous material and work by trapping sediment. Erosion control logs must be trenched into the ground to be effective.
Rock Armor	Rock armor is protection that consists of a layer of angular rocks installed on geotextile blankets at inlets and/or outlets of diversion ditches, drainpipes, and culverts. The rocks slow stormwater flow, thereby reducing erosion and settling out sediment.
Vehicle Tracking Pad	Vehicle tracking pads remove sediments prior to leaving a construction site.
Drainpipe	A drainpipe installed at the end of a diversion ditch allows stormwater from the well pad to travel through the pipe, while leaving sediments at the rock-armored inlet.

### 3.3.2 Non-Structural Practices for Erosion and Sediment Control

Non-structural practices are those that minimize potential for erosion and sediment transport. BMPs implemented at the Project site include interim and permanent stabilization. Site-specific scheduling for implementation of the practices, and personnel training are additional non-structural practices implements at the Project site. Non-structural BMPs for the Project are described in Table 4.

**Table 4. Non-structural BMPs**

BMP	Description
Mulching and crimping	Mulching and crimping certified weed-free straw into bare soil for temporary slope stabilization facilitates successful revegetation.
Revegetation	Revegetation includes grading, soil preparation, seeding, and mulching. Revegetation stabilizes slopes.
Preserving natural vegetation	Preserving natural vegetation where feasible prevents any unnecessary erosion.
Preventative maintenance	Preventative maintenance ensures BMPs are functioning properly.
Surface roughening	Surface roughening creates small ridges in exposed soil that follow the slope contour. Surface roughening is a temporary BMP that slows surface runoff and helps prepare the seedbed

BMP	Description
Site grading	Minimize grading of level and gently sloping terrain on-site and immediately off-site to reduce size of ground disturbance.

### 3.3.3 Phased BMP Implementation for the Construction Project

Each BMP will be installed during the appropriate phase of construction (as shown in Tables 5 and 6) and the SWMP will be modified if any BMP recommendation changes. After the initial grades are achieved, disturbed areas will be stabilized as soon as practical.

**Table 5. Phased implementation of structural BMPs**

Structural BMP	Type of Control	Prior to Construction Activities	During Construction	Interim/Final Stabilization
Diversion ditch	Sediment		X	X
Erosion control logs	Sediment	X	X	X
Rock armor	Sediment		X	X
Water bars	Erosion		X	X
Drain pipe	Sediment		X	X

**Table 6. Phased implementation of non-structural BMPs**

Non-structural BMP	Type of Control	Prior to Construction Activities	During Construction	Interim/Final Stabilization
Mulching and crimping	Erosion			X
Revegetation (seeding, mulching)	Erosion			X
Preservation of natural vegetation	Erosion	X	X	X
Surface roughening/grading techniques	Erosion		X	
Protection of trees	Erosion	X	X	X

### 3.3.4 Materials Handling and Spill Prevention

Various chemicals might be present during Project construction (see Table 7). These could be possible sources of pollution should the chemicals be spilled. At the proposed Project site, only individual containers of chemicals will be present and no herbicides, pesticides, or quantities of gasoline over 25 gallons will be stored.



Proper chemical handling and storage procedures at the site will include the following:

- No chemical containers will be placed on the ground within 100 feet of any water source.
- Chemicals will not be stored on the ground overnight; they will be stored in trucks or trailers for secondary containment and be covered when not in use.

**Table 7. Possible pollutants present at the Project site.**

Chemicals On-Site	Hazardous or Non-Hazardous*	BMPs to Minimize Impacts
Hydraulic fluids	Non-hazardous	Vehicle maintenance will be done off-site; proper chemical handling and storage.
Paints	Hazardous	Proper chemical handling and storage.
Solvents	Hazardous	Proper chemical handling and storage.
Grease	Non-hazardous	Proper chemical handling and storage.
Glues	Hazardous	Proper chemical handling and storage.
Gas	Hazardous	Vehicle fueling will be done off-site; proper chemical handling and storage.
Oil	Non-hazardous	Vehicle maintenance will be done off-site; proper chemical handling and storage.

\* As defined by the United States Environmental Protection Agency (<http://www.epa.gov/wastes/index.htm>).

No vehicle fueling or vehicle maintenance will occur within the Project area. All equipment will be inspected at the beginning of each day of operation to assure there are no leaks in equipment lines or engines.

In the event of an accidental spill of any chemical, the contractor must immediately notify the Stormwater Administrator. The Stormwater Administrator's spill response will be based on whether the material is classified as hazardous or non-hazardous by the EPA (Table 7). If the spilled material is non-hazardous, the contractor will use absorbent materials to dispose of the spill, per local landfill regulations. If the material spilled is hazardous, the Stormwater Administrator or contractor will contact an environmental cleanup company to remove and land farm the contaminated soil in accordance with state and federal requirements. Depending on the nature of the spill and material involved, the CDPHE (the 24-hour spill reporting line is 877-518-5608), downstream water users, or other agencies may also need to be notified.

The Stormwater Administrator will update the SWMP immediately to document any spills and how they were handled. All contractors will be informed of the chemical handling and storage procedures prior to construction.

### 3.3.5 Dedicated Concrete or Asphalt Batch Plants

There will be no concrete or asphalt batch plants in the construction areas.

### 3.3.6 Vehicle Tracking Control

Transportation corridors to and from the Project area will be clearly marked in the field. No vehicular access will be permitted outside the access corridors.

Visual monitoring of construction equipment and weather conditions will be conducted to prevent tracking of sediment and mud onto public roads.

### 3.3.7 Waste Management and Disposal, Including Concrete Washout

No waste materials will be stored on-site during actual well-site construction. During drilling operations, garbage and trash will be contained in portable trash cages that will be emptied periodically and the contents properly disposed. No other construction- or drilling-generated wastes (except authorized wastes in drilling reserve pits) will be stored on-site. While drilling operations are in progress, portable toilets will be maintained on-site, and the contents emptied periodically and disposed in accordance with applicable requirements. No concrete washouts are required for this Project. The following waste management procedures will be followed:

- **Produced Water**—Class I non-hazardous disposal well.
- **Produced Water with Oil**—Oil separated for sale or disposed at a state-licensed facility and water disposed at a Class I non-hazardous disposal well.
- **Solid Waste**—Garbage will be hauled from the site by Coleman to an approved landfill. Any brush, small trees, or limbs will be used as an erosion control BMP.
- **Sewage**—Chemical toilets will be provided and maintained during drilling operations and construction activities.
- **Drilling Fluids**—Drill cuttings, drill water, and completion fluids will be placed in a lined reserve pit or in a closed-loop system. If a reserve pit is used, it will be fenced on three sides, away from the pad during drilling; the fourth side will be fenced as soon as the rig is removed. The reserve pit will be allowed to dry or the free fluids will be removed by truck and reused in drilling operations or trucked to an approved disposal facility. Any tanks used will also be controlled with lining and/or gravel berms.

### 3.3.8 Groundwater and Stormwater Dewatering

Discharge to the ground of water from construction dewatering activities may be allowed, provided that:

- The source is groundwater and/or groundwater combined with stormwater that does not contain pollutants.
- The source and BMPs are identified in the SWMP.
- Discharges do not leave the site as surface runoff or to surface waters.

If discharges do not meet the above criteria, a separate CDPHE groundwater discharge permit will be required.

## 4. FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT

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Final stabilization is reached when all ground surface disturbing activities at the site have been completed and uniform vegetative cover has been established with an individual plant density of at least 70 percent of pre-disturbance levels.

For trenching, clearing, and grubbing areas, final stabilization will consist of seeding along with surface roughening, crimped mulching, and/or installation of erosion control blankets.

Reclamation on private land will be determined post-construction (based on the native seed mix listed in Table 8) and after consulting the landowners. The reclamation and reseeding practices used to achieve final stabilization include:

- Contouring and re-establishing previous slopes where feasible.
- Seeding the disturbed areas not utilized by the Project with the designated seed mixes and seeding techniques.
- Seeding will occur when seasonal or weather conditions are most favorable for the area. Whenever possible, seeding will be timed to take advantage of moisture. This generally means seeding will be scheduled after the growing season and before the succeeding winter. Revegetation treatments will be accomplished as soon as practicable, following completion of construction.
- Seeding at the rate specified by the SWMP, the application methodology, and in pounds of pure live seed per acre. The seed mix will be certified weed-free and not contain primary or secondary noxious weed seeds.
- On terrain where drill seeding is appropriate, seed may be planted using a drill equipped with a depth regulator to ensure proper depth of planting. The seed mix will be planted evenly and uniformly over the disturbed area. Broadcast seeding will occur on steep terrain and on areas where the cut vegetation and rocks were redistributed over the ROW. The seeding rate will be doubled when the broadcast seeding method is used.

Coleman will use the NRCS re-vegetation guidelines for energy production projects as additional reclamation measures. The seed mix and application rates (per the NRCS non-irrigated native grass mix) are listed in Table 8, with the addition of Quickquard.



**Table 8. Seed mix and application rates**

Species	Pure Live Seed (Pounds/Acre)
Thickspike wheatgrass	2.0
Western wheatgrass	6.4
Slender wheatgrass	1.1
Indian ricegrass	1.2
Sandberg bluegrass	0.2
Blue grama	0.3
Quickguard sterile tritcale	4
<b>Total pounds Pure Live Seed/Acre</b>	<b>15.2</b>

Seeding and mulching is planned for all soil disturbance areas. As soon as practical, soil should be properly prepared and seeded after construction activities are completed.

Seeded areas will be inspected to ensure that the soil stabilization method (e.g., surface roughening, crimped mulch, etc.) was applied correctly and has not been compromised. The area will also be inspected for erosion and/or sediment deposition. Maintenance items would include re-grading and seeding bare areas or areas of thin vegetative growth, and/or adding additional BMPs as appropriate.

## **5. INSPECTION AND MAINTENANCE**

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### **5.1 Inspection Schedules**

During construction, the designated party responsible for inspections at the site will make a thorough assessment at least every 14 days. When construction is completed, the inspection frequency will change to a 30-day inspection cycle until conditions at the site are finally stabilized, as defined by the CDPHE. These inspections will ensure that the implemented BMPs are functioning as specified. Additional information about inspection procedures during each phase is outlined below.

#### **5.1.1 Minimum Inspection Schedule**

The minimum inspection schedule applies to those sites under “active construction.” Active construction starts when the ground is initially disturbed to when the construction activity is completed. Active construction also includes the preparation of areas that will be revegetated for interim reclamation. During this period, a thorough inspection of the site and associated BMPs must be conducted at least once every 14 days. In addition, inspections are required after post-storm events that cause surface erosion at the Project site.

## **5.1.2 Exceptions to the Minimum Inspection Schedule**

### **5.1.2.1 Post-Storm Event Inspections at Temporarily Idle Sites**

Temporarily idle sites are those where no construction activities are occurring after a storm event. At such sites, post-storm event inspections must be conducted prior to restarting construction activities, but no later than 72 hours following the event. The delay also must be noted on the inspection report; routine inspections still must be conducted at least every 14 days.

### **5.1.2.2 Completed Sites**

Once construction is completed and the site has been prepared for final stabilization (including the completion of appropriate soil preparation, amendments, and stabilization practices), the site or portion of the site is considered a completed site. A completed site qualifies for a reduced inspection schedule, as the potential for pollution is reduced if the site has been adequately prepared and/or seeded. However, because slopes and other disturbed areas are not vegetated, erosion in these areas may still occur and may require maintenance activities.

For a completed site, inspection is required monthly until final stabilization is achieved; post-storm event inspections are not required.

### **5.1.2.3 Winter Conditions Inspections Exclusion**

Winter inspections are not required at sites where construction activities are temporarily halted, snow cover exists over the entire site for an extended period, and melting conditions do not exist. When this exclusion is used, inspection records must document the date when snow cover occurred, construction activities ceased, and melting conditions began.

## **5.2 Inspection Procedures**

Each stormwater inspection will be documented in a Field Inspection Report, which will include at least the minimum requirements outlined by the CDPHE (Appendix D). The inspection will include observations of the following for evidence of (and/or potential for) pollutants leaving the site boundaries, entering the stormwater drainage system, or discharging to state waters:

- The construction site perimeter
- All disturbed areas
- Areas used for material or waste storage that are exposed to precipitation
- Locations where vehicles enter and exit the site
- Erosion and sediment control measures identified in the SWMP to ensure they are maintained and operating correctly

All erosion and sediment control practices identified in the SWMP will be evaluated to ensure they are maintained and operating correctly.

### **5.3 BMP Maintenance or Replacement and Failed BMPs**

All erosion and sediment control practices and other protective measures identified in the SWMP will be maintained in effective operating condition. BMPs that are not adequately maintained in accordance with good engineering, hydrologic, and pollution control practices are considered no longer operating effectively and will be modified or replaced. BMPs implemented at the site must be adequately designed and maintained so they provide control for all potential pollutant sources that are associated with the construction activity and so they prevent pollution or degradation of state waters. Where site inspections note the need for BMP maintenance activities, BMPs will be maintained so conditions are met. Maintenance items include (but are not limited to) the removal of accumulated sediment, repair or replacement of worn or damaged sections, repositioning to correct placement, and reinstallation of displaced BMPs. Accumulated sediment and debris will be removed from a BMP when the sediment level reaches half the height of the BMP, or anytime the sediment or debris adversely impacts the BMP's functions.

### **5.4 Replacement and Failed BMPs**

To ensure continued effective performance, comprehensive inspection and maintenance procedures will be conducted to assess the adequacy of site BMPs and the necessity of changes to BMPs. When the site assessment results in a determination that new or replacement BMPs are necessary, then BMPs will be installed to ensure effective erosion control. Where BMPs have failed, they will be addressed as soon as possible (immediately in most cases) to minimize the discharge of pollutants. When new BMPs are installed or replaced, the SWMP will be updated as necessary.

### **5.5 Record Keeping**

The SWMP will be kept accurate and reflect on-site ground conditions. Only changes in site conditions that require new or modified BMPs need to be addressed in the SWMP. Coleman will document inspection results and maintain a record of the results for 3 years, following expiration or inactivation of permit coverage.

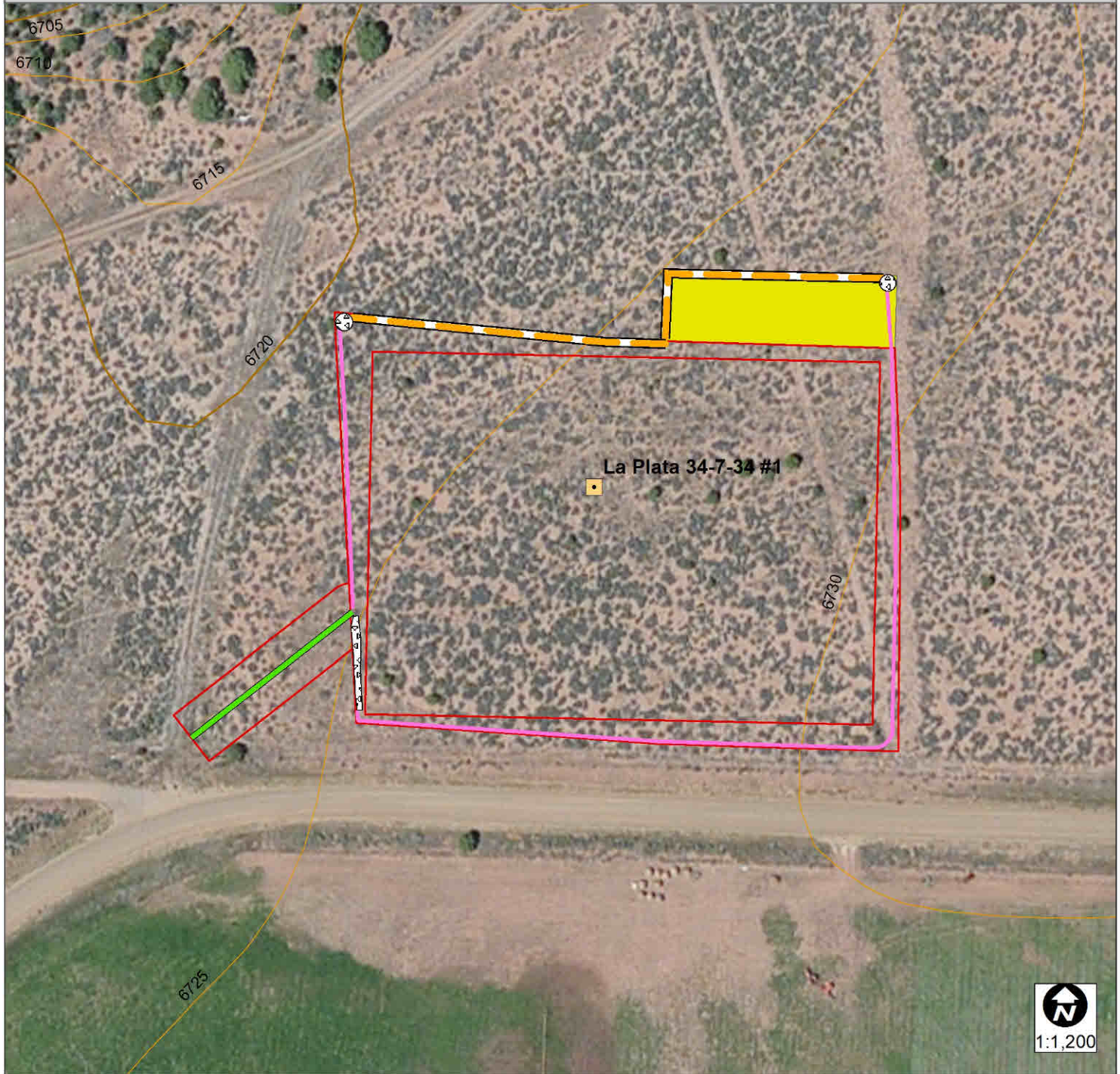
A Field Inspection Report will be completed during each site inspection. The completed inspection reports will be maintained in Appendix D. At a minimum, the following items will be documented as part of the site inspection report:

- Inspection date.
- Name(s) and title(s) of personnel making the inspection.
- Location(s) of discharges of sediment or other pollutants from the site.
- Location(s) of BMPs that need to be maintained.
- Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location.
- Location(s) where additional BMPs are needed, but not in place at the time of inspection.



- Deviations from the minimum inspection schedule.
- Description of corrective action for items 3, 4, 5, and 6 listed above; dates the corrective action(s) was taken; and measures taken to prevent future violations including requisite changes to the SWMP (if necessary).
- After adequate corrective action(s) has been taken or where a report does not identify any incidents requiring corrective action(s), the Field Inspection Report will contain a signed statement indicating the site is in compliance with the permit to the best of the signer's knowledge and belief.

## **Appendix A: BMP Map**



**Legend**

- Pre Construction
- Rip Rap
- Diversion Ditch
- Erosion Control Wattles
- Access Road
- Construction Site Boundary
- Soil
- Contours
- 20 ft
- 5 ft

0 40 80 160  
Feet

Coordinate System: NAD 1983 StatePlane Colorado South FIPS 0503 Feet

**LA PLATA 34-7-33 #1**

**BMP MAP**

LA PLATA COUNTY, COLORADO

T34N, R7W SECTION 33

BAYFIELD, CO QUADRANGLE

Date: 2/25/2014

Name: Coleman\_33\_34\_BMP\_201400225.mxd

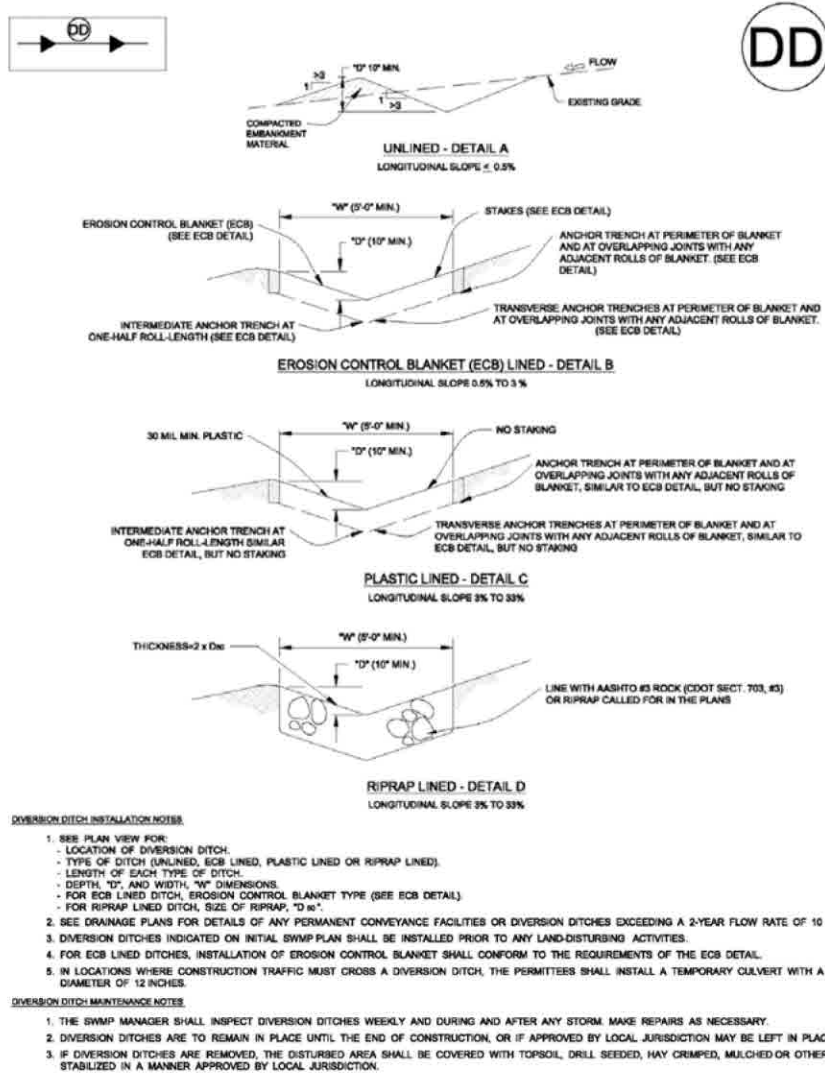
## **Appendix B: Permit Application and Permit**



## **Appendix C: BMP Diagrams**

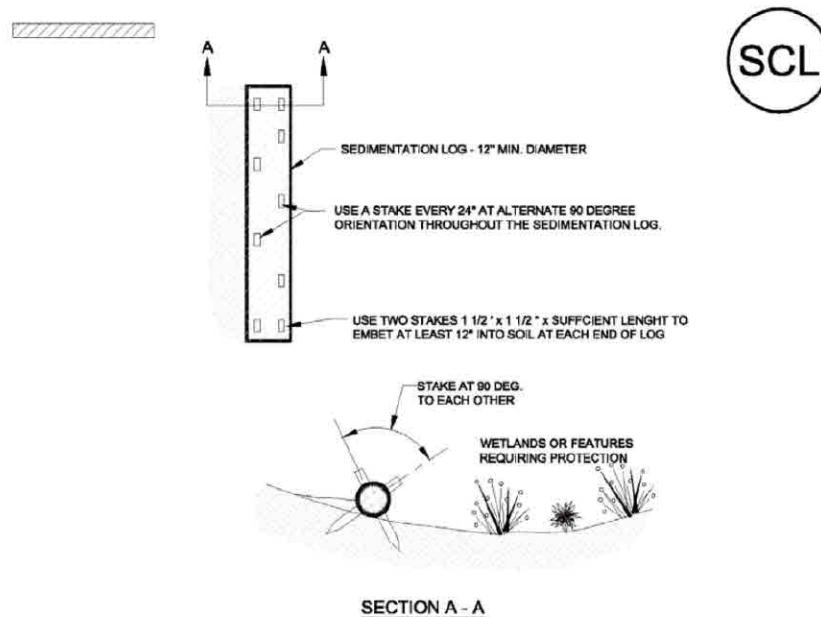
DRAINAGE CRITERIA MANUAL (V. 3)

CONSTRUCTION BEST MANAGEMENT PRACTICES



DETAIL BASED ON DETAILS PROVIDED BY DOUGLAS COUNTY, COLORADO

Figure C5-3—Temporary Diversion Dike & Ditch



**SEDIMENT CONTROL LOG INSTALLATION NOTES**

1. SEE PLAN VIEW FOR:  
-LOCATION AND LENGTH OF SEDIMENT CONTROL LOG.
2. SEDIMENT CONTROL LOGS INDICATED ON INITIAL SWMP PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.
3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER.
4. NOT FOR USE IN CONCENTRATED FLOW AREAS.
5. THE SEDIMENT CONTROL LOG SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 2" AND ADJACENT LOGS SHALL BE FIRMLY PACKED AGAINST EACH OTHER TO ELIMINATE ALL GAPS.

**SEDIMENT CONTROL LOG MAINTENANCE NOTES**

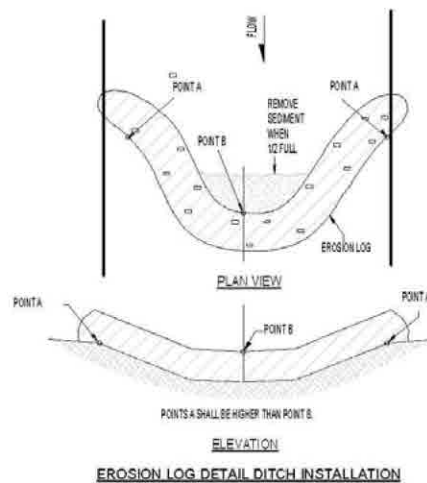
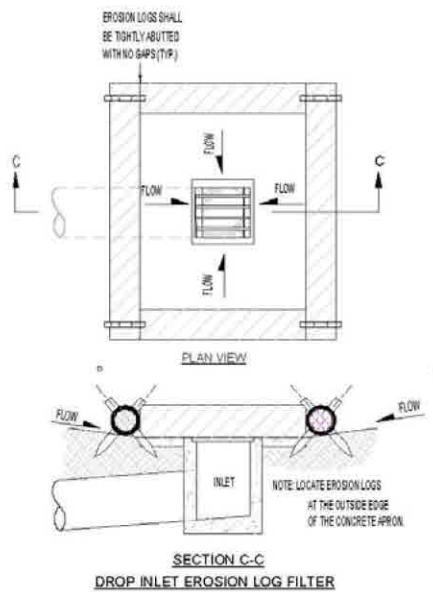
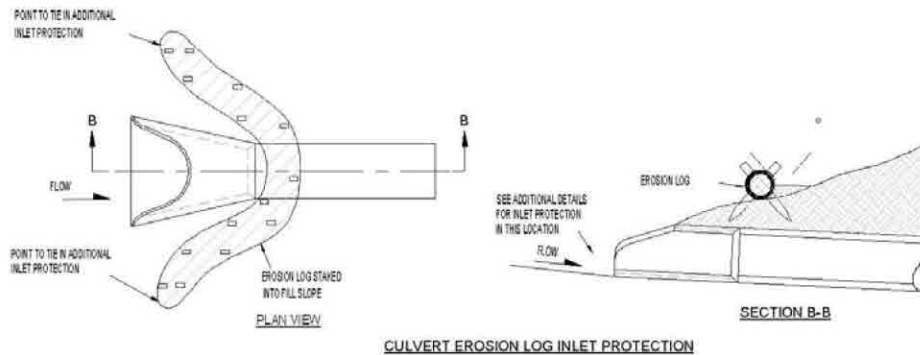
1. THE SWMP MANAGER SHALL INSPECT SEDIMENT CONTROL LOGS DAILY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OF CLEANOUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOGS SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT DEPTH REACHES 1/2 THE HEIGHT OF THE CREST OF THE LOG.
3. SEDIMENT CONTROL LOGS SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE COVERED WITH TOPSOIL, DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

DETAIL BASED ON DETAILS PROVIDED BY DOUGLAS COUNTY AND CDOT

Figure C5-8—Sediment Control Log

DRAINAGE CRITERIA MANUAL (V. 3)

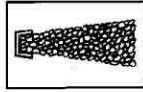
CONSTRUCTION BEST MANAGEMENT PRACTICES



NOTE EROSION LOGS SHALL BE TIGHTLY ABUTTED WITH NO GAPS.

Adapted From Colorado Department of Transportation (2007)

Figure C5-9—Sediment Control Log Application Examples



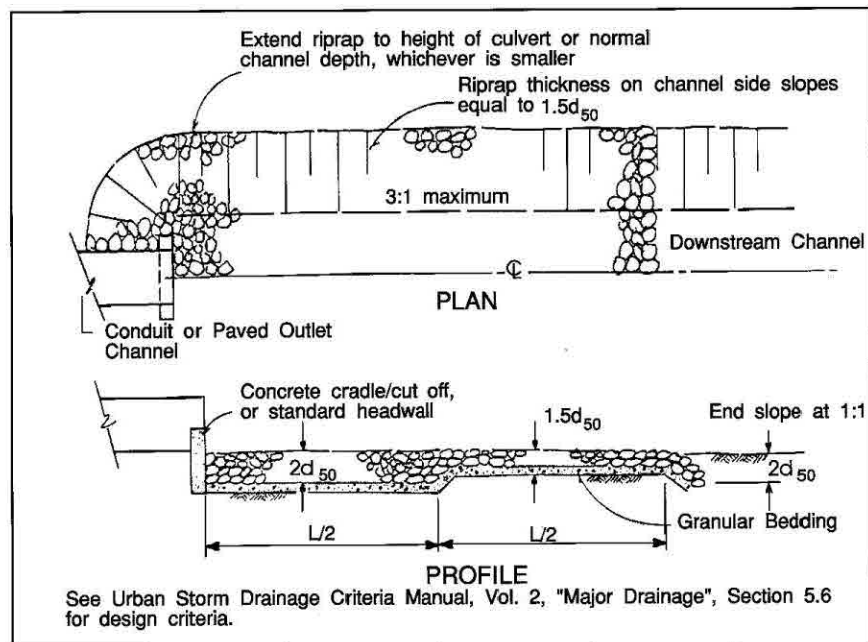
## OUTLET PROTECTION (ROCK ARMOR)

### Definition

Structurally lined aprons or other acceptable energy dissipating devices placed at the outlets of pipes or paved channel sections.

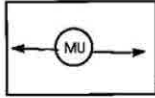
### Purposes

To prevent scour at stormwater outlets and to minimize the potential for downstream erosion by reducing the velocity of concentrated stormwater flows.



From: Major Drainage, Volume 2, Urban Storm Drainage Criteria Manual

Figure C5-16—Outlet Protection for a Culvert in a Channel



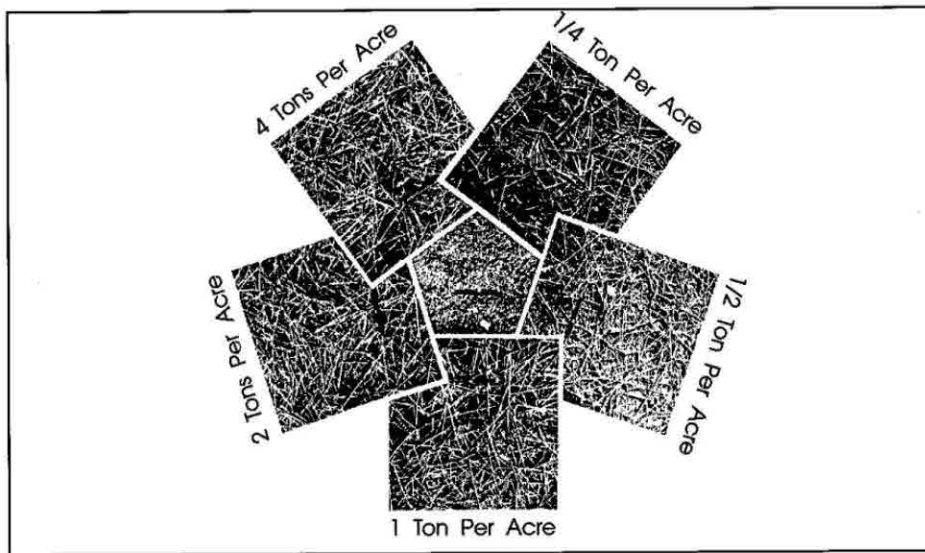
## MULCHING

### Definition

Application of plant residues or other suitable materials to the soil surface.

### Purposes

1. To prevent erosion by protecting the soil surface from raindrop impact and reducing the velocity of overland flow.
2. To foster the growth of vegetation by increasing available moisture and providing insulation against extreme heat and cold.



From: Environmental Protection Agency, 1976

Figure C4-2—Mulching

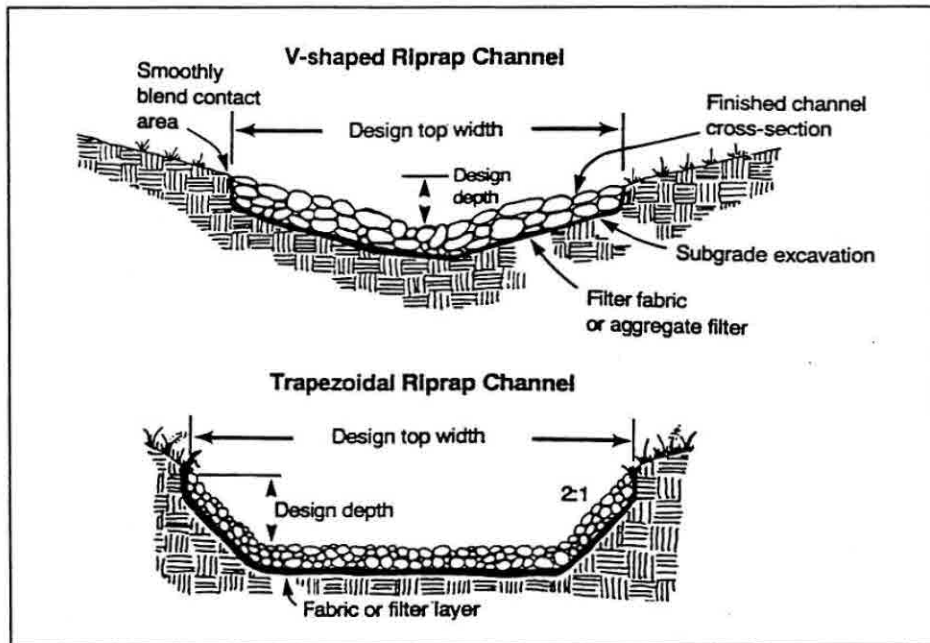
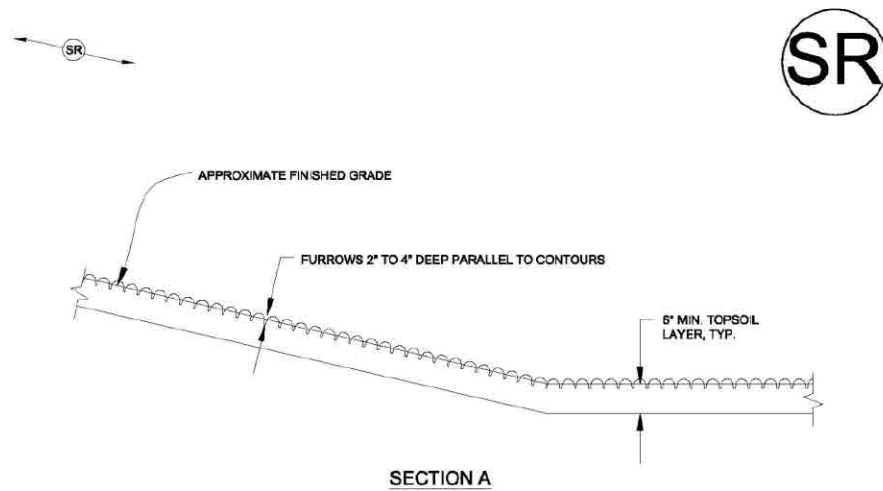


Figure 6. Typical riprap-lined channel cross-sections. (Source: Ref. 1)





**SURFACE ROUGHENING INSTALLATION NOTES**

1. SURFACE ROUGHENING SHALL BE PROVIDED ON ALL FINISHED GRADES (SLOPES AND "FLAT" AREAS) WITHIN 2 DAYS OF COMPLETION OF FINISHED GRADE (FOR AREAS NOT RECEIVING TOPSOIL) OR WITHIN 2 DAYS OF TOPSOIL PLACEMENT.
2. AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOD ARE TO BE PLACED WITHIN 7-DAYS OF FINISHED GRADING DO NOT NEED TO BE SURFACE ROUGHENED.
3. DISTURBED SURFACES SHALL BE ROUGHENED USING RIPPING OR TILLING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.

**SURFACE ROUGHENING MAINTENANCE NOTES**

1. THE SWMP MANAGER SHALL INSPECT THE SURFACE ROUGHENING WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. VEHICLES AND EQUIPMENT SHALL GENERALLY BE CONFINED TO ACCESS DRIVES AND SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.
3. IN NON-TURF GRASS FINISHED AREAS, SEEDING AND MULCHING SHALL TAKE PLACE DIRECTLY OVER SURFACE ROUGHENED AREAS WITHOUT FIRST SMOOTHING OUT THE SURFACE.
4. IN AREAS NOT SEEDED AND MULCHED AFTER SURFACE ROUGHENING, SURFACES SHALL BE RE-ROUGHENED AS NECESSARY TO MAINTAIN GROOVE DEPTH AND SMOOTH OVER ANY RILL EROSION.

DETAIL BASED ON DETAILS PROVIDED BY DOUGLAS COUNTY, COLORADO

**Figure C4-1—Surface Roughening**

## **Appendix D: Inspection Forms**

### STORMWATER INSPECTION REPORT

<b>INSPECTION TYPE:</b>	ROUTINE MONTHLY	ROUTINE 14 DAY	POST STORM EVENT
<b>SITE STATUS:</b>	ACTIVE-CONSTRUCTION, INTERIM RECLAMATION, FINAL STABILIZATION		

**SITE NAME:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**WEATHER:** Date/Time Storm Ended: \_\_\_\_\_ Amount of Precipitation: \_\_\_\_\_

**INSPECTOR NAME AND TITLE:** \_\_\_\_\_

NO.	DESCRIPTION	
1.	Location(s) of discharges of sediment or other pollutants from site:	
2.	Location(s) of BMP's that need to be maintained:	Actions Taken and Date Corrected:
3.	Location(s) of BMP's that failed to operate as designed or proved inadequate for a particular location:	Actions Taken and Date Corrected:
4.	Location(s) where additional BMP's are needed that were not in place at the time of inspection:	Actions Taken and Date Corrected:
5.	Deviations from the minimum inspection schedule:	

6.	Description of corrective action for above items, dates(s) corrective actions taken to prevent future violations, including requisite changes to the SWMP, as necessary:
7.	Identify any attached photos, including photo descriptions of non-compliant BMPs, weeds, new BMPs, and site photo
VEGETATIVE STATUS	
8.	Are there weeds or invasive species present in the project area? List and give location of invasive species if present.
9.	Describe vegetation status. Do sections of the project need to be reseeded? If yes, describe location and seeding method.

List and draw on site map updates that need to be made to reflect current conditions, including new or removed BMPs, areas of disturbance, interim reclamation/temporary stabilization, or areas of final stabilization.

Have issues identified during the last inspection been corrected? If not list below and explain:

List changes required to the Site Specific Data Sheet:

General Site Notes:

Corrective action(s) have been taken, or no incidents were identified that require corrective action, therefore the site is in compliance with the permit to the best of the signer's knowledge and belief.

Signature: \_\_\_\_\_