

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. COC64841
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name 110 511
2. Name of Operator Mesa Energy Partners, LLC E-mail: DCesark@mesa-energy.net Contact: Dave Cesark		7. If Unit or CA Agreement, Name and No. Buckhorn Draw Unit COC73788X
3a. Address 1001 17th Street, Suite 1140 Denver CO 80202		8. Lease Name and Well No. BDU 25-1-199
3b. Phone No. (include area code) 303-951-0483		9. API Well No. 05-103-11811
4. Location of Well (Report location clearly and in accordance with any State Requirements. *) At surface 481' FNL 649' FEL NE 1/4 NE 1/4 Lat: 39.940756 Long: 108.445657		10. Field and Pool, or Exploratory Wildcat
At proposed production zone		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 25 T 1S R 99W Meridian: 6th PM
14. Distance in miles and direction from nearest town or post office. * Location is ±33.3 miles east of Rangely, Colorado.		12. County or parish Rio Blanco
15. Distance from proposed location to nearest property or lease line, ft. (Also nearest Drig, unit line, if any) Unit= ±649' Lease= ±481'		13. State Colorado
16. No. of acres in lease 2280.00	17. Spacing Unit dedicated to this well 40	
18. Distance from proposed location* to nearest well, drilling, completed or applied for, on this lease, ft. Yellow Creek 1 ± 1,260'	19. Proposed depth 10,700'	20. BLM/BIA Bond No. on file B004929
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,567.3' GR	22. Approximate date work will start * February 1, 2011	23. Estimated duration 45-60 days drig + completion

24. Attachments

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

- | | |
|--|---|
| <ol style="list-style-type: none"> Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | <ol style="list-style-type: none"> Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). Operator certification. Such other site specific information and/or plans as may be required by the BLM. |
|--|---|

25. Signature 	Name (Printed/Typed) Christopher A. Noonan, 303-820-4480	Date February 24, 2011
Title Permit Agent for Mesa Energy Partners, LLC		

Approved by (Signature) 	Name (Printed/Typed) /s/ Ester M. McCullough	Date 3/2/12
Title ASSOCIATE FIELD MANAGER		
Office White River Field Office-Meeker, CO		

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.

REALTY Survey No Row
 PAT
 PE 3/2/12
 PET (Instructions on page 3)
 GEO
 NRS
AFMSS IN OUT

(continued on page 2)

"APPROVAL TO FLARE GRANTED
WHILE DRILLING AND TESTING"

APPROVED FOR A PERIOD
NOT TO EXCEED 2 YEARS

"Conditions of Approval Attached"

Revised:
February 24, 2011

Mesa Energy Partners, LLC
BDU 25-1-199
API #: 05-103-11811
Page 2

Please find attached:

- 1) Cover Letter, CO APD Form 2, Drilling Program, Casing Design, BOP 2M Diagram, Surface Use Plan of Operations, and Table 1: Wells in a 1-Mile Radius.
- 2) Survey Plat, Well Pad Layout, Rig Layout, Cut and Fill, Typical Proposed Production Facility Diagram, Access Road, Area/Water Haul, Pipeline Maps and wellsite photos.
- 3) Archaeological, cultural and historical information for the new construction on federal lands will be contained in a report and submitted separately by Grand River Institute.

Please send a copy of all correspondence to Banko Petroleum Management, Inc. at 385 Inverness Parkway, Suite 420, Englewood, CO 80112-5849. Please contact David Banko at 303-820-4480 or at david@banko1.com, if you have any questions. Thank you.

Conditions of Approval

CO-110-2011-0087-EA

3160(LLCON05000)

CONDITIONS OF APPROVAL FOR Buckhorn Draw Unit well pad: COC64841: 25-1-199

Operator: Mesa Energy Partners, L.L.C.
Well No.: BDU 25-1-1999
Location: T1S, R99W, Sections 25 (NENE), 6th PM
Lease No.: COC64841
COC75212 (pipeline ROW)
COC75213 (water line ROW)
COC75212-01 (temporary use permit)

The Bureau of Land Management, White River Resource Area Office
Address and telephone contacts are:

Address: 220 East Market, Meeker, Colorado 81641
Office Phone: (970) 878-3800
Office Fax: (970) 878-3805

Natural Resource Specialist: Christina J. Barlow, office phone (970) 878-3815

All lease and/or unit operations are to be conducted in such a manner to ensure full compliance with the applicable laws, regulations (43 CFR Part 3160), Onshore Orders, Notices to Lessees, and the approved plan of operations. Approval of this application does not relieve you of your responsibility to obtain other required federal, state, or local permits.

This application is valid for a period of two years from the date of approval. Any requests for extensions must be submitted prior to the end of the two year period. If the application terminates, any surface disturbance created under the application must be rehabilitated in accordance with the approved plan within 90 days of termination, unless otherwise approved by the authorized officer.

You have the right to request a State Director Review (SDR) of the decision to approve this application with the attached conditions in accordance with 43 CFR 3165.3(b). A request for a SDR must occur prior to filing an appeal with the Interior Board of Land Appeals (IBLA). Your request for a SDR and all supporting documentation must be filed with the State Director (CO-922), 2850 Youngfield St., Lakewood, Colorado 80215, within 20 business days of receipt of this letter.

NOTICE: The following conditions of approval are accepted by the operator upon the commencement of any activity under this authorization or thirty (30) days after the operator's receipt of this authorization, whichever occurs first, *Emery Energy, Inc. (On reconsideration)*. 67 IBLA 260 (1982).

After occurrence of either of the foregoing events and with the exception of those conditions of approval pertinent to the "Drilling Plan," changes to any of the following conditions of approval may only occur by Sundry Notice and then only in the event of an emergency, unforeseen circumstances, or unnecessary or undue degradation of the land, its resources or the environment. Changes to the "Drilling Plan" remain subject to change by Sundry Notice only

Post-Construction Notifications

11) In an attempt to track interim and final reclamation of federal actions related to the development of federal mineral resources, the operator shall provide the *designated Natural Resource Specialist* with geospatial data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS) (e.g., GIS point and polygon features). These data will be used to accurately locate and identify all geographic as-built (i.e., constructed and design implemented) features associated with this project and included in the Application for Permit to Drill (APD) or Sundry Notice (SN), as appropriate.

- These data shall be submitted within 60 days of construction completion. If the operator is unable to submit the required information within the specified time period, the operator shall notify the designated Natural Resource Specialist via email or by phone, and provide justification supporting an extension of the required data submission time period.
- GIS polygon features may include, but are not limited to: full well pad footprints (including all stormwater and design features), constructed access roads/widths, existing roads that were upgraded/widths, and pipeline corridors.
- Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or (3) AutoCAD .dwg or .dxf files. If possible, both (2) and (3) should be submitted for each as-built feature. Geospatial data must be submitted in UTM Zone 13N, NAD 83, in units of meters. Data may be submitted as: (1) an email attachment or (2) on a standard compact disk (CD) in compressed (WinZip only) or uncompressed format. All data shall include metadata, for each submitted layer, that conforms to the *Content Standards for Digital Geospatial Metadata* from the Federal Geographic Data Committee standards. Questions shall be directed to WRFO BLM GIS staff at (970) 878-3800.

If the operator is unable to send the data electronically, the operator shall submit the data on compact disk(s) to:

BLM, White River Field Office
Attn: Natural Resource Specialist
220 East Market Street
Meeker, Colorado 81641

Internal and external review of the reporting process and the adequacy of the associated information to meet established goals will be conducted on an on-going basis. New information or changes in the reporting process will be incorporated into the request, as appropriate. Subsequent permit application processing may be dependent upon successful execution of this request, as stated above.

Resource-Specific Mitigation During Construction, Drilling, and Production:

Access and Transportation

- 20) The operator shall employ dust suppression techniques as outlined in the Surface Use Plan of Operations (SUPO) whenever there is a visible dust trail behind vehicles during the construction and drilling phases of the Proposed Action. Any technique other than the use of freshwater as a dust suppressant on BLM lands will require prior written approval from BLM.
- 21) Should the proposed action occur simultaneous with a wild horse gather, all project-related traffic would need to be coordinated with the BLM and the contractor for the gather operation.
- 22) To minimize the incidents of young foals becoming dislocated from their dam (mare), crews would be required to slow or stop when wild horses are encountered, allowing the bands to move away at a pace slow enough so that foals can keep pace and are not separated.

Surface and Ground Water Quality

- 23) To protect surface waters below the project area, keep road inlet and outlet ditches, sediment retention basins, and culverts free of obstructions, particularly before and during spring run-off and summer convective storms. Provide adequate drainage spacing to avoid accumulation of water in ditches or road surfaces. Install culverts with adequate armoring of inlet and outlet. Patrol areas susceptible to road or watershed damage during periods of high runoff.

Cultural Resources

- 24) Mesa is responsible for informing all persons who are associated with the project that they will be subject to prosecution for knowingly disturbing archaeological sites or for collecting artifacts. If any archaeological materials are discovered as a result of operations under this authorization, activity in the vicinity of the discovery will cease, and the BLM WRFO Archaeologist will be notified immediately. Work may not resume at that location until approved by the AO. Mesa will make every effort to protect the site from further impacts including looting, erosion, or other human or natural damage until BLM determines a treatment approach, and the treatment is completed. Unless previously determined in treatment plans or agreements, BLM will evaluate the cultural resources and, in consultation with the State Historic Preservation Office (SHPO), select the appropriate mitigation option within 48 hours of the discovery. Mesa, under guidance of the BLM, will implement the mitigation in a timely manner. The process will be fully documented in reports, site forms, maps, drawings, and photographs. The BLM will forward documentation to the SHPO for review and concurrence.
- 25) Mesa Energy Partners, L.L.C (Mesa) assumes responsibility for the integrity of site 5RB.6013 for the duration of the life or operation of Buckhorn Draw Unit 25-1-199 well.

notices to lessees, addressing the emission of and/or the handling, use, and release of any substance that poses a risk of harm to human health or the environment.

- 31) Where required by law or regulation to develop a plan for the prevention of releases or the recovery of a release of any substance that poses a risk of harm to human health or the environment, provide a current copy of said plan to the BLM WRFO.
- 32) Through all phases of oil and gas exploration, development, and production, all lessees and/or operators and holders of rights-of-way shall employ, maintain, and periodically update to the best available technology(s) aimed at reducing: a) emissions, b) fresh water use, and c) utilization, production, and release of hazardous material.
- 33) All substances that pose a risk of harm to human health or the environment shall be stored in appropriate containers. Fluids that pose a risk of harm to human health or the environment, including but not limited to produced water, shall be stored in appropriate containers and in secondary containment systems at 110% of the largest vessel's capacity. Secondary fluid containment systems, including but not limited to tank batteries shall be lined with a minimum 24 mil impermeable liner.
- 34) Construction sites and all facilities shall be maintained in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
- 35) As a reasonable and prudent lessee/operator in the oil and gas industry, acting in good faith, all lessees/operators and right-of-way holders will report all emissions or releases that may pose a risk of harm to human health or the environment, regardless of a substance's status as exempt or nonexempt and regardless of fault, to the BLM WRFO (970) 878-3800.
- 36) As a reasonable and prudent lessees/operator and/or right-of-way holder in the oil and gas industry, acting in good faith, all lessees/operators and right-of-way holders will provide for the immediate clean-up and testing of air, water (surface and/or ground), and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the lessee/operator or right-of-way holder fails, refuses or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the BLM WRFO may take measures to clean-up and test air, water (surface and/or ground), and soils at the lessee/operator's expense. Such action will not relieve the lessee/operator of any liability or responsibility.
- 37) With the acceptance of this authorization, the commencement of operations under this authorization, or within thirty calendar days from the issuance of this authorization, whichever occurs first, and during the life of the pipeline, the right-of-way holder and the lessee/operator, and through the right-of-way holder and lessee/operator, its agents,

- 42) The Reclamation Status Report will be submitted electronically via email and as a hard-copy to WRFO Reclamation Coordinator, Brett Smithers (brett_smithers@blm.gov). Please submit the hardcopy to:

BLM, White River Field Office
220 East Market Street
Meeker, Colorado 81641
Attn: Brett Smithers

The Reclamation Status Report will be submitted annually for all actions that require disturbance of surface soils on BLM-administered lands as a result of the Proposed Action. Actions may include, but are not limited to, well pad and road construction, construction of ancillary facilities, or power line and pipeline construction. The Reclamation Status Report will be submitted by September 30th of each calendar year, and will include the well number, API number, legal description, UTM coordinates (using the NAD83 datum, Zone 13N coordinate system), project description (e.g., well pad, pipeline, etc.), reclamation status (e.g., Phase I Interim, Phase II Interim, or Final), whether the well pad or pipeline has been re-vegetated and/or re-contoured, percent of the disturbed area that has been reclaimed, method used to estimate percent area reclaimed (e.g., qualitative or quantitative), technique used to estimate percent area reclaimed (e.g., ocular, line-intercept, etc.), date seeded, photos of the reclaimed site, estimate of acres seeded, seeding method (e.g., broadcast, drilled, hydro-seeded, etc.), and contact information for the person(s) responsible for developing the report. The report will be accompanied with maps and GIS data showing each discrete point (i.e., well pad), polygon (i.e., area where seed was applied for Phase I and/or Phase II interim reclamation or area reclaimed for final reclamation), or polyline (i.e., pipeline) feature that was included in the report. Geospatial data shall be submitted: for each completed activity electronically to the designated BLM staff person responsible for the initial request and in accordance with WRFO geospatial data submittal standards (available from WRFO GIS Staff, or on the WRFO website). Internal and external review of the WRFO Reclamation Status Report, and the process used to acquire the necessary information will be conducted annually, and new information or changes in the reporting process will be incorporated into the report.

- 43) The operator will be required to meet with the WRFO reclamation staff in March or April of each calendar year and present a comprehensive work plan. The purpose of the plan is to provide information pertaining to reclamation activities that are expected to occur during the current growing season. Operators shall also provide a map that shows all reclamation sites where some form of reclamation activity is expected to occur during the current growing season.

Conditions of Approval

WRFO shall be verbally notified as soon as reasonably possible. A log acceptable to the WRFO shall be run to determine the top of cement prior to commencing remedial cementing operations. If cement is circulated to surface and subsequently falls back, top job(s) will be performed until cement remains at surface.

8. Due to the extensive lost circulation problems that are being encountered in the Piceance Basin during drilling operations from surface to total depth (TD), and given that all usable water zones, potential productive zones, and lost circulation zones shall be protected and/or isolated per Onshore Order #2, the White River Field Office requires sufficient volumes of cement be pumped to meet these requirements. Cement tops behind intermediate and production casing will be verified by an acceptable log to ensure compliance with this Order. **We require cement to be run a minimum of 200' above the shoe of the previous casing string.**

9. Chronologic drilling progress reports must be sent directly to the BLM White River Field Office on a daily basis, either electronically or by fax (970-878-3805) to the Petroleum Engineer and/or other designated petroleum engineering technicians until the well is drilled to total depth.

10. All drill cuttings shall be contained in a pit on the pad of the well being drilled, or hauled to an approved disposal site. All pits shall maintain a minimum of two feet of free board at all times.

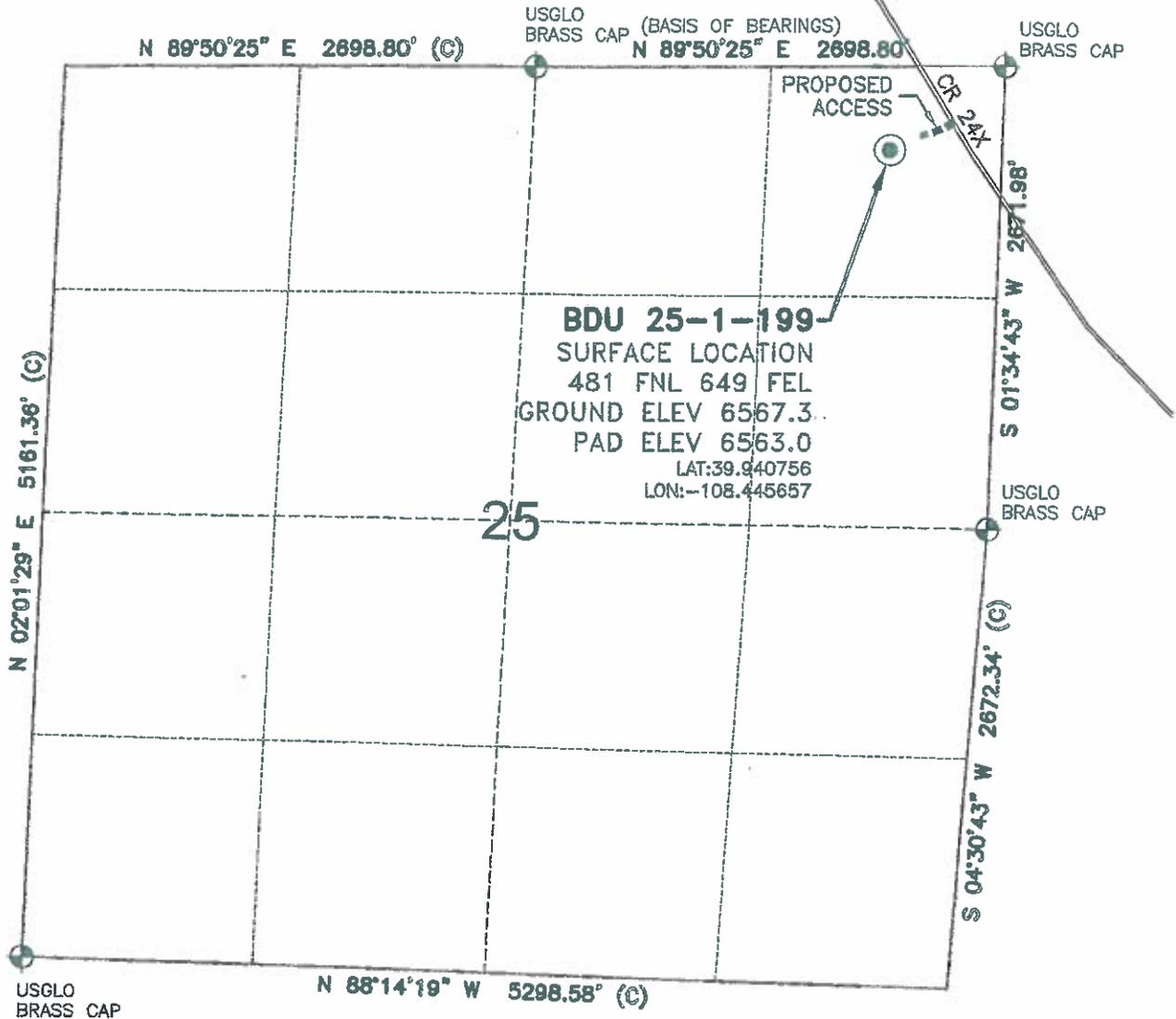
11. For foam and ultralight cement jobs that are performed in cementing the intermediate or production strings, the operator will wait at least 36 hours for cement to harden before running a specialized log capable of reading pipe cement bond and verifying tops of cement. The White River Field Office shall be verbally notified prior to running such specialized log with enough advance notice to allow a representative from this office to witness. Logs showing pipe cement bond and tops of cement for intermediate and production cement jobs will be forwarded to the BLM.

12. One copy of all charted BOPE tests, logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed with the completion report, Form 3160-4. The logs should be submitted in a digital format, on a CD. This completion report shall be filed within 30 days of completion of operations and submitted prior to, or along with the first production notice.

13. The WRFO requires the measurement of individual gas, oil (condensate) and water production streams at the wellhead, unless otherwise approved in advance by the BLM. The sales point for natural gas will be at the wellhead. All meters will be calibrated in place prior to any deliveries. The White River Field Office will be provided with a date and time for the initial meter calibration and all future meter proving and calibration schedules with

WELL LOCATION MAP

BDU 25-1-199 PAD



SURVEYOR'S STATEMENT

The undersigned hereby states that the well location shown hereon was staked on the ground based on existing monumentation and/or physical evidence found in the field and is correct to the best of my knowledge, information and belief.

NOTES

- 1.) Horizontal and vertical datum, based on NGS control point "KM 0280" with an elevation of 6434. NAVD 1988.
 - 2.) All directions, distances, and dimensions shown hereon are based on coordinates from the "Colorado coordinate system of 1983 north zone" (article 52 of title 38, C.R.S.).
 - 3.) All section line dimensions shown hereon are based on field measurements of existing monuments and/or physical evidence found in the field unless otherwise indicated. Refer to land survey plats deposited in Rio Blanco County & BLM Survey.
 - 4.) Physical features shown hereon are for graphical representation only.
 - 5.) See Form 2A for visible improvements within 400' of wellhead.
 - 6.) Distances to nearest section lines are measured perpendicularly.
 - 7.) This is not a land survey nor land survey plat.
 - 8.) Date of Survey 11/4/10 Date of Drawing 11/11/10. REV 2
- PDOP Reading: 3.7 Instrument Operator: EJG

1 OF 12 11/11/10



North



Graphic Scale in Feet
1 inch = 1000 feet



LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 303 688 0379 Fx 303 685 6320

MESA ENERGY PARTNERS, LLC
 BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
 6th PM RIO BLANCO COUNTY COLORADO

2/25/2011

Additional Operator Remarks:

A check for the filing fee in the amount of six thousand five hundred dollars (\$6,500) will be mailed by Mesa Energy Partners, LLC to the BLM White River Field Office to accompany this APD.

Please send a copy of all correspondence to Banko Petroleum Management, Inc. at 385 Inverness Parkway, Suite 420, Englewood, CO 80112-5849. Please contact David Banko or Christopher Noonan at 303-820-4480, or at david@banko1.com or bob@banko1.com, respectively, if you have any questions. Thank you.

Mesa Energy Partners, LLC
Drilling Program

Buckhorn Draw Unit 25-01-199

Surface Location:
Bottom Hole Location:
Surface County:

NE/NE Sec 25, T1S, R99W
NE/NE Sec 25, T1S, R99W
Rio Blanco

Vertical

1. Estimated Tops of Important Geologic Markers

FORMATION	ESTIMATED TOP - TVD	Lithology	Oil/Gas/Water
Green River	Surface	SS & Shale	Possible Water
Top A Groove	1140	Sand	Possible Water
Mahogany Bench Top	1230	Oil Shale	Oil Shale
Base B Groove	1290	Sand	Possible Water
Wasatch	2,815	SS & Shale	No Potential Gas
Williams Fork	6,415	SS & Shale	Potential Gas
Top of Gas	7,415	SS & Shale	Top of Continuous Gas
Rollins	9,315	SS & Shale	Potential Gas
Cozzette	9,420	SS & Shale	Potential Gas
Corcoran	9,825	SS & Shale	Potential Gas
Sego	10,240	SS & Shale	Potential Gas
Permit TD	10,700	SS & Shale	Potential Gas Est. MD

2. Proposed Casing and Cementing Program

A. Casing Program: All New. The proposed casing and cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The surface casing shall be set at 2,500' and cemented back to surface either during the primary cement job or by remedial cementing. Cementing to surface will isolate all potential fresh water zones. Production casing is designed to have cement lifted at least 200' into intermediate

Hole Size	Casing Size	Depth Set MD	WT/Ft., Grade, & Joint	Cement
20	16	100	Line Pipe	To surface w/Class 3
12.25	9.625	2500	40#, N80, LT&C	Cemented to surface w/ Lead: 581 sx Class G (12.5 ppg) Tail: 291 sx Class G (13.5 ppg)
7.875	4.5	10,700	11.6#, P-110, LTC	Cemented to 200' into Surface Csg w/Lead: 1193 sx Class G (12.5 ppg) Tail: 670 sx Class G (13.5 ppg)

Yields: Class G Surface Lead
Class G Surface Tail
Class G 75-25 Poz
TKI

Yield = 2.11 R3/sx (12.5 ppg)
Yield = 1.54 R3/sx (14 ppg)
Yield = 1.89 R3/sx (12 ppg)
Yield = 1.88 R3/sx (13) ppg

-2500 psi compressive in 72 hours

Mesa Energy Partners, LLC
Drilling Program

Buckhorn Draw Unit 25-01-199

-Actual cement volumes will be determined by caliper log. If caliper logs are not available then surface casing cement volumes will be calculated at 100% excess and production casing cement volumes will be calculated at 25% excess.
-Centralizers will be installed per approved centralizer program from cement vendor

Casing String			
	Size	Weight (lb/ft)	Grade
Surface	9 5/8"	40	N-80
Production	4 1/2"	11.6	P-110

Casing Strength Properties			
	Size	Collapse (psi)	Burst (psi)
Surface	9 5/8"	3,090	5,750
Production	4 1/2"	7,589	10,690

Minimum Design Factors			
	Size	Collapse	Burst
Surface	9 5/8"	1.0	1.1
Production	4 1/2"	1.0	1.1

A. Surface Casing Design Considerations/Safety Factors:
 Surface casing @ 2500' MD / 2500' TVD, 9 5/8" 40# N-80 LTC
 Purpose: Protect shallow fresh water and contain MASP to TD
 Maximum anticipated mud weight at surface casing depth: 9.0 ppg
 Maximum anticipated mud weight at TD: 9.5 ppg
 TVD at production casing point: 10,700'
 Mesoverde pore pressure: 0.450 psi/ft

Collapse Design:
 Evacuated 9-5/8" 40# N-80 casing with 9.0 ppg drilling fluid density:
 Load = 9.0 ppg * 0.052 psi/ft * 2500' = 1,170 psig
 Rating: 3,090
 S.F.: 2.64

Burst Design:
 Assume kick with fully evacuated hole and influx gradient of 0.0 psi/ft
 (Calculations assume shoe will not break down)
 MASP (Load) = 10,700' * (0.45) psi/ft = 4,815 psig
 Rating: 5,750
 S.F.: 1.19

Tensile Design:
 9 5/8" 40# N80, LT&C Designed on Air Weight + Buoyancy + overpull margin
 Load = 2,500 * 40 * 0.862 + 100,000 lbs (OPM) = 186,200 lbs
 Rating: 737,000
 S.F.: 3.96
 Overpull with S.F. = (737,000 / 1.5) - (2,500 * 40 lb/ft) = 391,333 lbs

Mesa Energy Partners, LLC
Drilling Program

Buckhorn Draw Unit 25-01-199

B. Production Casing @ 10,700 MD / 10,700 TVD; 4-1/2", 11.8# P-110, LTC	
Maximum Anticipated Mud Weight at Total Depth	11.0 ppg
Maximum Anticipated Equivalent Formation Pressure at TD	11.0 ppg
Maximum Surface Treating Pressure for Fracture Operations	9,720 psig
Assumed Gas Gradient for Production Operations	0.115 psi/ft
Collaps Design:	
Designed on evacuated casing properties with 11.5 ppg drilling fluid density with no internal back-up	
Load = $11.5 \times 0.052 \times 10,700$	6,399 psig
Rating	7,580 psig
S.F.	1.18
Burst Design:	
Assume maximum surface shut-in pressure during production, and maximum surface treating pressure during fracture stimulation operations	
Design Consideration #1: Maximum Surface Shut-in Pressure	
MASIP (Load) = $10,700 \times (0.45 - 0.115)$ psi/ft	3,585 psig
Rating	10,690 psig
S.F.	2.98
Design Consideration #2: Maximum Surface Treating Pressure During Frac Operations	
MATP:	9,720 psig
Rating	10,690 psig
S.F.	1.100
Tensile Design:	
Designed on Air Weight + Buoyancy	
Load = $(10,700 \times 11.6 \text{ lb/ft} \times 0.832) + 100,000$ lbs (DPM)	203,268 lbs
Rating	279,000 lbs
S.F.	1.37
Overpull with SF = $279000/1.1 - 103,268$	150,369 lbs

3. Pressure Control Equipment (5,000 psi Schematic Attached)

BOP's and choke manifold will be installed and pressure tested before drilling out under surface casing (subsequent pressure test will be performed whenever seals are broken), and then will be checked daily as to mechanical operating condition. BOP's will be pressure tested at least once every 30 days. Ram type preventers and related pressure control equipment will be pressure tested at rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield on the casing, whichever is less. Annular type preventers will be pressure tested to 50% of their rated working pressure. All casing strings will be pressure tested to 0.22 psi/ft or 1500 psi, whichever is greater, not to exceed 70% of internal yield.

A PVT, Stroke Counter, and flow sensor will be installed to check for flow and monitor pt volume.

Mesa Energy Partners, LLC
Drilling Program

Buckhorn Draw Unit 25-01-199

4. Mud Program

Interval	Mud Weight	Fluid Loss	Viscosity	Mud Type
0 - 3500'	5.0 - 8.5	NC	20 - 80	Spud Mud
3500 - 6000'	5.0 - 10.5	6 - NC	30 - 100	Gel Polymer
6000' - TD	8.5 - 11.0	4 - 10	30 - 100	Gel Polymer

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

5. Auxiliary Equipment

- Upper Kelly cock (lower Kelly cock - to be available on rig floor)
- Inside BOP or stab-in valve (available on rig floor)
- Mud Monitoring will be visually observed.

6. Evaluation Program

Logs: Triple Combo: TD to BSC (GR to surface)
CBL/CCL/GR: TD to 500' above TOC

DSTs: None

Cores: Possible sidewall cores in Williams Fork/Cameo

The proposed Evaluation Program may change at the discretion of the well-site geologist.

Completion procedures will be determined after reviewing data. Whether the well is completed as a dry hole or as a producer, the Well Completion Report and Log will be submitted not later than thirty (30) days after the completion of the well or after completion of operations being performed.

7. Abnormal Conditions

- Pressures: Cameo pressures are .4 ps/ft gradient. William Fork is normal to under pressured at .3 ps/ft gradient.
- Temperatures: No abnormal temperatures are anticipated.
- H₂S: No H₂S has been encountered in or known to exist in the general area.
- Estimated bottom-hole pressure: 4,200 psi.

8. Anticipated Starting Dates/ Mesa Energy Partners Contact

A. Anticipated Starting Dates

Anticipated Commencement Date:

Drilling Days:

Completion Days:

6/1/2013

Approximately 15 days

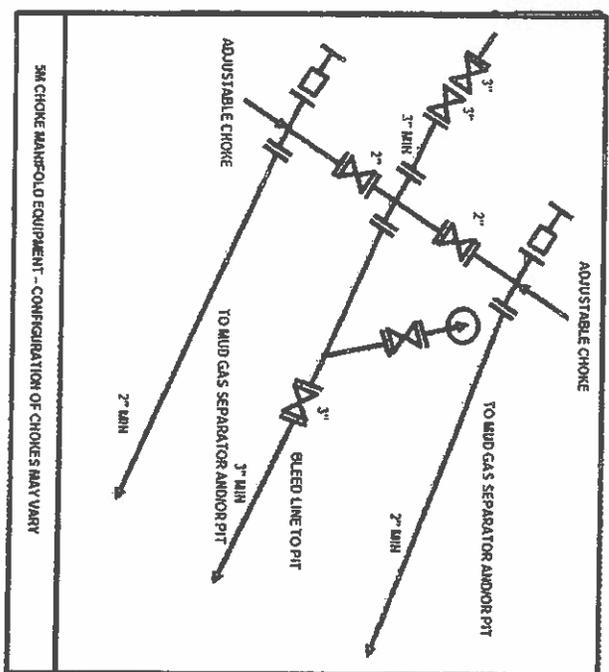
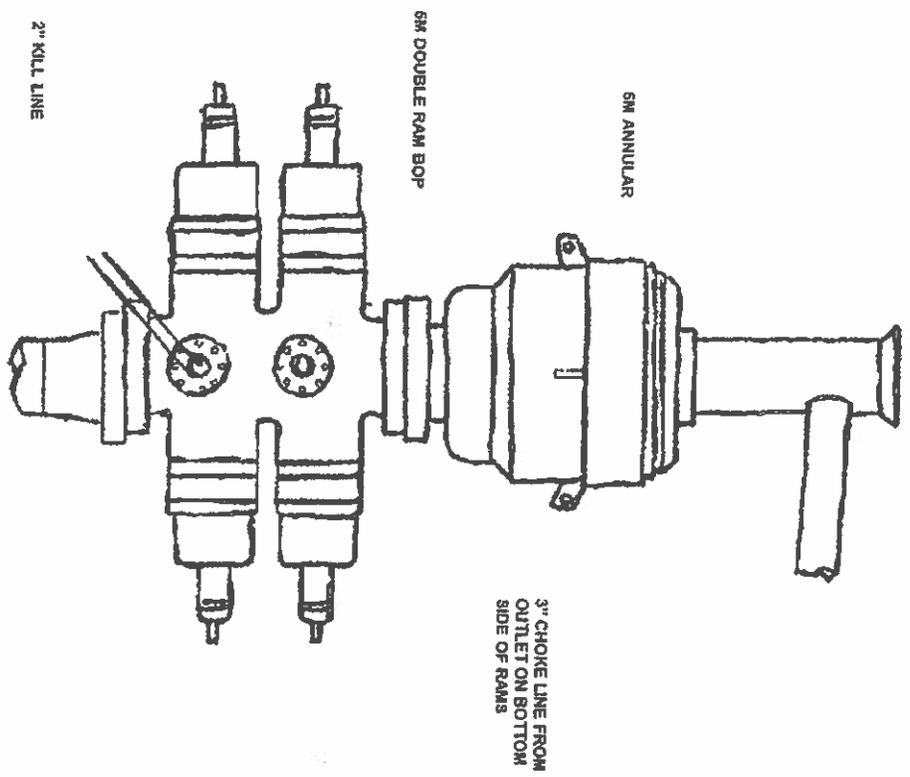
Approximately 15 days

B. Please contact Kevin Weller at phone no:

With any questions or concerns regarding this drilling program

720-536-2906

Cell Phone: 303-358-3080



Mesa Energy Partners, LLC
BDU 25-1-199
API #: 05-103-11811
481' FNL 649' FEL (NE/4 NE/4)
Sec. 25 T1S R99W
Rio Blanco County, Colorado
Surface: Federal
Federal Mineral Lease: COC64841

2011 APR 29 PM 3:00
RECEIVED
DOI BLM CO 110
MEEKER, CO 81641

SURFACE USE PLAN OF OPERATIONS
(Revised 4/28/11)

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents. This NOS process included an onsite meeting on April 20, 2010, prior to the submittal of the application, at which time the specific concerns of Mesa Energy Partners, LLC (Mesa) and the BLM were discussed. All specific concerns of the BLM representatives are addressed herein, as are specific stipulations from the BLM.

* Specific stipulations arising from the onsite meeting are shown as starred.

WELL LOCATION AND INTRODUCTION:

The wellsite was staked at 844' FNL 362' FEL (NE/4 NE/4) of Sec. 25 T1S R99W on May 26, 2010, by GeoSurv Land Surveying and Mapping (GeoSurv), surveyor, on behalf of Mesa, on a site that is geologically and topographically acceptable. The wellsite lies within the federal Buckhorn Draw Unit boundary identified by Serial Register No. COC73788X.

A NOS was submitted to BLM in Meeker on March 19, 2010, for this location. An onsite meeting was held on April 20, 2010. Attending were: Briana Potts, Bob Lang, Lisa Belmonte, Jim Michels, Maggie Marston, and Jill Schulte - BLM; Ed Winters - Colorado Division of Wildlife (CDOW); and Dave Cesark and Kevin Weller - Mesa.

The drillsite location was moved approximately 463' northwest to avoid a cultural site. The new footages are 481' FNL 649' FEL (NE/4 NE/4) of Sec. 25 T1S R99W.

DIRECTIONS TO LOCATION:

From the town of Rangely, Colorado, proceed easterly, then northeasterly along Highway 64 ±9.1 miles to the junction Highway 64 and County Road 122 (CR 122). Turn right on CR 122 and travel southerly, then southeasterly ±16.4 miles to the junction of CR 122 and County Road 24X (CR 24X). Continue on CR 24X and proceed southeasterly ±7.8 miles. Turn right on flagged proposed access road and follow road in a southwesterly direction for ±0.03 miles to the proposed BDU 25-1-199 staked location.

- 1) **EXISTING ROADS (See Access Road and Vicinity maps)**
 - A) The well is a development/confirmation well.
 - B) Existing roads within 1.00 mile consists of, County Road 24X, to within 0.03 miles, which will provide access to the proposed location.
 - C) Plans for improvement and/or maintenance of existing roads are to maintain in as good or better conditions than at present.

- 2) PLANNED ACCESS ROADS (See Access Road map)
±190' (0.03 miles) – New road construction – Sec. 25 T1S R99W – BLM on lease

All access roads will be maintained so as to meet BLM Manual Section 9113 standards for road shape and drainage features at all times during construction, drilling and production.

- A) Running surface width to be approximately 18' – 20', total disturbed width to be no more than 50'. A regular maintenance plan will include, but not be limited to blading, ditching, and surfacing.
- B) Borrow ditches to be backsloped 3:1 or shallower. Weather permitting, the access road will be mowed and the borrow ditch material will be pulled over the top of the mowed area.
- C) Maximum grade – the average grade will be 10% or less, wherever possible. The 10% grade will only be exceeded in areas where physical terrain or unusual circumstances require it.
- D) One (1) 18" x 30' culvert will be installed prior to commencement of drilling operations. Drainage to consist of wing ditches between the access road and the wellsite and will be installed prior to commencing drilling operations. The borrow ditches along the proposed access road will be re-seeded if the well is completed as a producer. The reseeded of the borrow ditches will reduce the area utilized by this location.
- E) Surfacing material, if necessary, to consist of native material from borrow ditches. Top soil will be saved on the backslope of the borrow ditches, separate from other native material. Crown will be constructed from excess native materials pulled from borrow ditches and initial road grading, and will be of sufficient grade as described above.
- F) No major road cuts are necessary.
- G) Fence cuts, gates and cattleguards will not be required.
- H) Road construction on public lands shall meet the minimum standards listed in BLM Manual Section 9113 and shall be constructed under the direction of a qualified construction supervisor(s). The qualified construction supervisor shall be an engineer, company superintendent or other representative who is competent and knowledgeable in oilfield road and drillsite construction, and able to speak for the operator. The dirt contractor, or drilling/completion foreman whose primary expertise is not in construction, do not qualify as construction supervisors.
- D) For more information on how planned access roads are handled in the Preconstruction/Construction/Interim/Final Reclamation stages, please refer to Buckhorn Draw Master Stormwater Management Plan (SWMP). This plan is on file at the operator's field office and is available for review and inspection upon request. This plan is also on file at the White River Field Office (WRFO) BLM office.

3) LOCATION OF EXISTING WELLS

Within a 1-mile radius:

Proposed	NONE
Drilling	NONE
Abandoned	SEE TABLE 1
Disposal/injection	NONE
Shut-In	NONE
Producing	SEE TABLE 1

LOCATION OF EXISTING PRODUCING FACILITIES OPERATED BY MESA ENERGY PARTNERS, LLC

Within one (1) mile: NONE

The nearby well data has been taken from the COGCC website on July 22, 2010.

4) NEW PRODUCTION FACILITIES PROPOSED

- A) The production facility shall initially consist of one 400 bbl condensate tank, two 400 bbl water tanks, 1 separator and a pigging station. BLM will be contacted via Sundry Notice (SN) if the production facility changes.
- B) Dimension of the proposed facility is 320' x 400' = 128,000 ft², for drilling operations. Approximate total disturbance is ±5.6 acres.
- C) Traveled portion of production site will be gravel surfaced if necessary upon completion of production facility installation and prior to production. Site preparation for production will be done with standard excavation equipment using native materials. Additional surface material (if required) will be obtained from commercial sources or an approved borrow area. If necessary, and prior to construction, Mesa will notify the BLM via SN when an exact source has been determined. Construction and maintenance will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment.
- D) All above ground permanent structures will be painted to blend with the surrounding landscape and per BLM recommendations. The typical paint color for this area is Juniper Green (no Munsell color). All production facilities will be painted within six months of installation. Facilities that are required to comply with Occupation Safety and Health Administration (OSHA) Rules and Regulations will be excluded from this painting requirement.
The tallest structure will be no greater than 20' in height.
- E) A dike will be constructed completely around any production facilities which contain fluids (i.e. production tanks, produced water tanks, etc.) These dikes will be constructed of compacted subsoil, be impervious, hold 110% of the capacity of the largest tank, and be independent of the back cut.
- F) A Produced Water Staging Area has been permitted and constructed off location in Sec. 11 T1S R99W in order to minimize/reduce water truck traffic. The Big Duck Creek Water Staging Facility will handle produce water from this wellsite. The Pinyon Ridge Fed C1W disposal well located NESE of Sec. 21 T3N R97W will handle water trucked from the Big Duck Creek Water Staging Facility.
- G) Run off and sediment control Best Management Practices (BMPs) will be implemented and maintained according to the Buckhorn Draw Unit Storm Water Management Plan.
- H) Mesa shall protect all survey monuments, witness corners, reference monuments and bearing trees in the affected areas against disturbance during construction, operation, maintenance and termination of the facilities authorized herein.

- D) Mesa shall immediately notify the Authorized Officer (AO) in the event that any corners, monuments or markers are disturbed or are anticipated to be disturbed. If any monuments, corner or accessories are destroyed, obliterated or damaged during construction, operation or maintenance, Mesa shall secure the services of a Registered Land Surveyor to restore the disturbed monuments, corner or accessories, at the same location, using surveying procedures found in the Manual of Surveying Instructions for the Survey of the public Lands of the United States, latest edition. Mesa shall ensure that the Registered Land Surveyor properly records the survey in compliance with the Colorado Revised Statutes 38-53-101 through 38-53-112 (1973) and shall send a copy to the AO.

5) LOCATION OF WATER SUPPLY

- A) Water to be used for the drilling and completing of this well may be delivered to the location via (1) pumping through a water pipeline, or (2) hauling by truck over the roads utilizing CR 24, CR24X, CR 5, CR 86 and Dry Fork Road. The water source may be from (1) recycled flow back water (frac water from completions), production water gathered from producing wells, or some combination thereof resulting from ongoing operations in the Piceance Basin that may be treated for reuse, or (2) fresh water from available water rights in the Piceance Basin.
- B) The fresh water providers are Williams and EnCana. Due to possible summer water restrictions it is imperative that multiple sources be available for use. Williams fresh water will come from their nearby *Ryan Gulch Ranch* fresh water loadout located at 39.864375 latitude and 108.430068 longitude, NAD83, and will utilize CR 24X, CR 24, and CR 86. EnCana's fresh water source will come from the *Footie Ranch* loading facility located at -40.008838 latitude and 108.24631 longitude, NAD83, and will utilize CR 24X, CR 24, CR 5, Dry Fork Road.
- C) Mesa Energy estimates that we will use ~5,000 bbls of fresh water for drilling, and ~50,000 bbls of either fresh or recycled water for completions. The amount of water used for dust abatement is estimated to be ~ 1,000 bbls/year. If it becomes necessary to truck water, CR 24, CR24X, CR 5, CR 86 and Dry Fork Road will be utilized.

6) SOURCE OF CONSTRUCTION MATERIALS

- A) Construction materials will consist of native materials from borrow ditches and location areas.
- B) Surfacing materials will be obtained from available permitted sources, if needed, and consist of pit gravel.
- C) All access roads crossing Federal land are described under Item #2, and shown on Access Road and Vicinity Maps.
- D) No additional construction material from other sources is anticipated at this time. If, in the future it is required, the appropriate actions will be taken to acquire it from private sources. A sundry notice will be submitted stating the intended source of the materials
- E) All trees on the locations, access road, and proposed pipeline routes shall be purchased prior to construction from the Bureau of Land Management, White River Resource Area, and disposed of by one of the following methods:
- F) Trees shall be cut with a maximum stump height of six inches (6") and cut to 4-foot lengths and stacked off location. Trees will not be dozed off the location or access road, except on private surface where trees may be dozed. Trees may also be dozed on pipeline routes and then pulled back onto right-of-way as part of final reclamation.
- G) Limbs may be scattered off location, access road or along the pipeline, but not dozed off.

- H) Request to allow for use of site slash (site vegetation trees, shrubs, forbs & grasses) in preconstruction BMP's and permanent stormwater BMP's as sediment control within our limits of disturbance on access roads, pipelines and facility construction.

7) WASTE DISPOSAL

- A) Drill cuttings will be buried in reserve pit when dry.
- B) Drilling fluid will be evaporated and then buried in the reserve pit when dry.
- C) Completion fluids will be flowed to the reserve pit and allowed to evaporate.
- D) Reserve pit layout is illustrated on Pad Layout, Production Schematic, Typical Rig Layout, Cross Sections, and Existing Contours. Dimensions of the pit are 80' x 120' x 15'
- E) The reserve pit will be constructed to BLM Goldbook, Onshore Order #1 and #7 standards and to meet the requirements of the Colorado Oil and Gas Conservation Commission. Reserve pit will be lined with a synthetic liner 24 mil or thicker. The reserve pit liner shall be made of any manmade synthetic material of sufficient size and qualities to sustain a hydraulic conductivity no greater than 1×10^{-7} cm/sec after installation and which is sufficiently reinforced to withstand normal wear and tear associated with the installation and pit use thereof. The liner shall be chemically compatible with all substances that may be put into the pit.
- F) Reserve pit will be fenced on three sides during drilling operations and on fourth side at time of rig release. Pit will remain fenced until backfilled.
- G) The reserve pit will include appropriate netting, or fencing and escape ramps as necessary to protect public health, safety and welfare or to prevent adverse environmental impacts resulting from access to a pit by wildlife, migratory birds, domestic birds, or members of the general public, in accordance with applicable BLM/COGCC rules and regulations.
- H) Flare pit for air drilling will (if used) be located minimum 100' from well bore.
- I) Produced water will be piped to the Big Duck Creek Water Staging Facility during completion and testing. The Pinyon Ridge Fed CIW disposal well located NESE of Sec. 21 T3N R97W will handle produced fluids trucked from the Big Duck Creek Water Staging Facility.
- J) Drilling fluids including salts and chemicals will be contained within the reserve pit. If a closed loop drilling system is proposed, a separate SN will be submitted with proposed handling of drill cuttings and fluids. Upon termination of drilling and completion operations, the drilling mud and cuttings will be tested per BLM and COGCC regulations and a disposal plan will be submitted to BLM via SN. Disposal will be completed within ninety (90) days after termination of drilling and completion activities. Any off-site disposal will be identified in the SN.
- K) In the event that adverse weather conditions prevent removal of the fluids from the mud system within this time period, an extension may be granted by the AO upon receipt of a written request from Mesa.
- L) Produced fluids – liquid hydrocarbons produced during completion operations will be treated, stored on lease until such time as they can be properly gauged and sold, according to BLM requirements.
- M) Sewage disposal facilities will be in accordance with State and Local Regulations. Sewage may not be buried on location or put in a borehole. Colorado Department of Public Health and Environmental (CDPHE) Regulations prevent this unless a CDPHE Permit is obtained. A proposed disposal site is the Rio Blanco County Solid Waste Landfill located at: Wray Gulch Landfill 1496 CR 72, Meeker, Colorado; located 22 miles west of Meeker on Highway 64. If another disposal site is selected the BLM will be notified via SN.

- N) Garbage and other waste - burnable waste will be contained in a portable trash cage which will be totally enclosed with small mesh wire. Cage and contents will be transported to and trash dumped at a CDPHE approved Sanitary Landfill upon completion of operations. A proposed disposal site is the Rio Blanco County Solid Waste Landfill located at: Wray Gulch Landfill 1496 CR 72, Meeker, Colorado; located 22 miles west of Meeker on Highway 64. If another disposal site is selected the BLM will be notified via SN.
- O) Trash will be picked up, if scattered, and contained in trash cage as soon as practical after rig is moved off.
- P) Upon release of the drilling rig, rathole and mousehole will be filled. Debris and equipment not required for production will be removed.
- Q) Any reportable spills of oil, gas, salt water or other potentially hazardous substances will be reported immediately to the BLM, and other responsible parties, and will be mitigated immediately, as appropriate, through clean up or removal to an approved disposal site.
- 8) ANCILLARY FACILITIES
- A) Self-contained travel-type trailers may be used on site during drilling operations.
- B) Certified Colorado Department of Housing units will be provided for use in the extraction of gas on COGCC approved pads. These units will be used by Essential Personnel and will abide by Federal, State, and local regulations which directly pertain to Temporary Living Quarters (TLQ).
- C) Construction Methods Well Pads (Preconstruction/Construction/Interim/Final reclamation): refer to Buckhorn Draw Master Stormwater Management Plan, this plan is on file at the operator's field office and is available for review and inspection upon request.
- D) Potable water will be provided by water haulers certified by the Colorado Department of Public Health & Environment.
- E) Septic will be held in County approved engineered Individual Sewage Disposal System Vault and Haul systems.
- F) Waste materials generated by and from these units will be contained in wildlife proof containers and will be hauled weekly, or as needed.
- G) The Big Duck Creek Water Staging Facility has been permitted and constructed by Mesa separately in NWSE of Sec. 11 T1S R99W to handle produced water from this, and future wells.
- 9) WELLSITE LAYOUT (Pad Layout, Production Schematic, Typical Rig Layout and Existing Contours.)
- A) See attached drillsite plat and cut/fill diagram.
- B) Roads and well production equipment, such as tanks, treaters, separators, vents, electrical boxes, and equipment associated with pipeline operation, will be placed on location so as to permit maximum interim reclamation of disturbed areas. If equipment is found to interfere with the proper interim reclamation of disturbed areas, the equipment may be moved so proper re-contouring and revegetation can occur.
- C) Up to 6" of topsoil will be removed prior to location construction from the reserve pit area and/or any other disturbed areas. Topsoil will be stockpiled adjacent to the wellsite within the maximum disturbed area shown on the wellsite plat.
- D) Topsoil and spoils pile will be clearly separated as shown on Pad Layout.
- E) Erosion control measures will be applied pursuant to Mesa's General Permit to Discharge Stormwater under the Colorado Pollutant Discharge Elimination System and accompanying SWMP.
- F) To control drainage, the Best Management Practices for this location are perimeter ditch/berm, cut slope diversion.

10) PIPELINES AND FLOWLINES

All flowlines and pipelines will remain within the federal Buckhorn Draw Unit boundary, identified by Serial Register No. COC73788X. No separate Right-of-Way applications should be necessary.

Should drilling result in established commercial production the following will be shown:

Protective measures and devices to protect livestock and wildlife.

- A) All buried pipelines will be buried to a depth of 3 - 4 feet, except at road crossing where they will be buried to a depth of 4 feet.
- B) Construction width of the right-of-way/pipeline route shall be restricted to 50 feet of disturbance.
- C) Reclamation width of the right-of-way/pipeline route shall be approximately 14 - 16 feet.
- D) Length of proposed pipeline to tie-in of existing buried gas pipeline is approximately 3,750 feet.
- E) The proposed gathering line and the produce water line will both follow in the same trench as shown on the Proposed Pipeline Map. The lines will tie into established lines in the NWSW of Sec. 19 T1S R99W leading to the proposed Stake Springs Compressor Site and the Big Duck Creek Water Staging Facility.
- F) Please see "Ancillary Facilities" section for routing of water post Big Duck Creek Water Staging Facility.

11) SURFACE RESTORATION (General)

- A) Salvaging and spreading topsoil will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment.
- B) Earthwork for interim and final reclamation must be completed within six (6) months of well completion or plugging (weather permitting).
- C) In areas that will not be drill-seeded, the seed mix will be broadcast-seeded at twice the application rate shown.
- D) Fall seeding is preferred and will be conducted after September 15 and prior to ground freezing. Spring seeding will be conducted after the frost leaves the ground.
- E) Annual or noxious weeds shall be controlled on all disturbed areas as directed by the Field Office Manager. An intensive weed monitoring and control program will be implemented beginning the first growing season after interim and final reclamation. Noxious weeds that have been identified during monitoring will be promptly treated and controlled. A Pesticide Use Proposal (PUP) has been submitted to the BLM for approval prior to the use of herbicides. All reclamation equipment will be cleaned prior to use to reduce the potential for introduction of noxious weeds or other undesirable non-native species. The operator will coordinate all weed and insect control measures with state and/or local management agencies.
- F) Reclaimed areas will be monitored annually. Actions will be taken to ensure that reclamation standards are met as quickly as reasonably practical.
- G) Reclamation monitoring will be documented in a reclamation report and submitted to the WRFO.
- H) The WRFO will be informed when reclamation has been completed, is successful, and the site is ready for final inspection.

INTERIM RESTORATION (Production)

- A) Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area, back sloping and contouring all cut & fill slopes. These areas will be re-seeded.
- B) Wellpad size will be reduced to minimum size necessary to conduct safe operations. Cuts and fills will be reduced to 3:1 or shallower slope.
- C) Reserve pits will be closed and backfilled as soon as the pit contents are dry enough to do so, or no later than the end of the next full summer following rig release, whichever comes first, to allow sufficient time for the pit contents to dry. Reserve pits remaining open after this period will require written authorization of the AO. Immediately upon well completion, any hydrocarbons or trash in the reserve and flare pits will be removed. Pits will be allowed to dry, be pumped dry, or solidified in-situ prior to backfilling.
- D) Following completion activities, pit liners will be removed or removed to the solids level and disposed of at an approved landfill, or treated to prevent their reemergence to the surface and interference with long-term successful revegetation. If it was necessary to line the pit with a synthetic liner, the pit will not be trenched (cut) or filled (squeezed) while containing fluids. When dry, the pit will be backfilled with a minimum of five (5) feet of soil material. In relatively flat areas, the pit area will be slightly mounded to allow for settling and to promote surface drainage away from the backfilled pit.
- E) The portions of the cleared well site not needed for operational and safety purposes will be re-contoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Sufficient level area will remain for setup of a workover rig and to park equipment. In some cases, rig anchors may need to be pulled and reset after re-contouring to allow for maximum interim reclamation.
- F) Topsoil will be evenly re-spread and aggressively re-vegetated over the entire disturbed area not needed for all-weather operations including road cuts & fills and to within a few feet of the production facilities, unless an all-weather, surfaced, access route or small "teardrop" turnaround is needed on the wellpad.
- G) Initial seedbed preparation will consist of backfilling, leveling, and ripping all compacted areas. Final seedbed preparation will consist of contour cultivating to a depth of 4" - 6" inches within 24 hours prior to seeding. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation. A certified weed-free seed mix designed by BLM (shown below) to meet reclamation standards will be used. The seed mix will be used on all disturbed surfaces including pipelines and road cut & fill slopes.
- H) To help mitigate the contrast of re-contoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, debris, and rock over re-contoured cut & fill slopes.
- I) A proposed seed mixture for this location is:
BLM Native Seed Mix #3
- J) Reclamation will be considered successful if the following criteria are met:
- 70% of pre-disturbance cover
 - 90% dominate species*
 - Erosion features equal to or less than surrounding area
- *The vegetation will consist of species included in the seed mix and/or occurring in the surrounding natural vegetation.
- K) To control drainage during interim reclamation some of the BMP's for this pad include maintaining a bar ditch around the perimeter of the reclaimed pad with check dams.

FINAL RESTORATION (P & A – Removal of equipment)

- A) Flowlines on location will be removed before site reclamation and all flowlines between the wellsite and production facilities will remain in place and will be filled with water.
- B) If necessary to ensure timely revegetation, the pad will be fenced to BLM standards to exclude livestock grazing for the first two growing seasons or until seeded species become firmly established, whichever comes later. Fencing will meet standards found on page 18 of the Gold Book, 4th Edition, or will be fenced with operational electric fencing.
- C) Revegetation will be accomplished by planting mixed grasses as specified below. Revegetation is recommended for road area as well as around production site.
- D) A proposed seed mixture for this location is:
 - BLM Native Seed Mix #3
- E) Initial seedbed preparation will consist of backfilling, leveling, and ripping all compacted areas. Final seedbed preparation will consist of contour cultivating to a depth of 4" to 6" within 24 hours prior to seeding. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation. A certified weed-free seed mix designed by BLM (shown above) to meet reclamation standards will be used. The seed mix will be used on all disturbed surfaces including pipelines and road cut & fill slopes.
- F) All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be re-contoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Re-salvaged topsoil will be spread evenly over the entire disturbed site to ensure successful revegetation. To help mitigate the contrast of re-contoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, woody debris, and large rocks over re-contoured cut & fill slopes.
- G) At final reclamation all storm water management BMP's for drainage, sediment, and erosion will be removed in order to return the site to its natural state. All sediment will be managed through revegetation practices (seeding on contour, crimping straw on contour and/or erosion control hydro-mulch, pocking and topsoil distribution. Downgradient wattles will remain until vegetation establishment meets minimum requirements. Any stormwater management features utilized for final reclamation will be removed prior to FAN approval.

12) GENERAL INFORMATION

- A) Project area is situated in the undulating uplands north of the White River.
- B) Topographic and geologic features – high-relief area, well drained, sand and silt deposition, flat to rolling.
- C) Soil characteristics – loam.
- D) Flora consists of: Big Sagebrush, PJ, Broomweed, Rabbitbrush, Slender Wheatgrass, Crested Wheatgrass, Indian Ricegrass, Bluebunch Wheatgrass, June grass, Western Wheatgrass, and Phlox.
- E) Fauna observed: none; assume: mule deer, elk, coyotes, rabbits, raptors, prairie dogs, and rodents.
- F) Concurrent surface use - grazing and hunting.

- G) Mineral Lessor - Bureau of Land Management
White River Field Office
220 E. Market Street
Meeker, CO 81641 Phone: 970-878-3800
- H) Surface Owner
Drillsite/Access- Bureau of Land Management
White River Field Office
220 E. Market Street
Meeker, CO 81641 Phone: 970-878-3800
- I) *Proximity of water, occupied dwellings or other features: unnamed intermittent drainage ±900 feet to the south.*
- J) Archaeological, cultural and historical information for the new construction on federal lands will be contained in a report and submitted separately by Grand River Institute. ***Note: The wellpad and road have been moved to avoid a possible cultural site.***
- K) If any fossils are discovered during construction, the operator shall cease construction immediately and notify the AO so as to determine the significance of the discovery.
- L) A Class III (100% pedestrian) cultural resource inventory shall be completed prior to disturbance by a qualified professional archaeologist in the following areas: Well location. A report of the inventory will be submitted and approved by the BLM with stipulations as appropriate in order to comply with EO 11593 and Section 106 of the National Historic Preservation Act of 1966. See Section "General Information - K" above
- M) The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the AO. The AO will inform the operator as to the work needed to determine the following:
- Whether the materials appear eligible for the National Register of Historic Places;
 - The mitigation measures the operator will likely have to undertake before the site can be used (assuming in site preservation is not necessary); and,
 - A timeframe for the AO to complete an expedited review to acquire the State Historic Preservation Officer's concurrence that the findings of the AO are correct and that mitigation is appropriate.
- N) Mesa maintains a file, per 29 CFR 1910.1200(g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be transported across these lands may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous substances, EHS, and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

Mesa Energy Partners, LLC
BDU 25-1-199
API #: 05-103-11811
481' FNL 649' FEL (NE/4 NE/4)
Sec. 25 T1S R99W
Rio Blanco County, Colorado
Surface: Federal
Federal Mineral Lease: COC64841

APPLICATION FOR PERMIT TO DRILL
OPERATOR CERTIFICATION

LESSEE'S OR OPERATOR'S REPRESENTATIVE:

Operator

Mesa Energy Partners, LLC
1001 17th Street, Suite 1140
Denver, CO 80202
Phone: 303-951-0483
Fax: 303-951-0488

Permit Agent

Banko Petroleum Management, Inc.
385 Inverness Parkway, Suite 420
Englewood, Colorado 80112-5849
Phone: 303-820-4480
Fax: 303-820-4124

Dave Cesark – Vice President, Environmental
and Regulatory Affairs

+ David Banko – Consulting Petro Engineer
david@banko1.com

Field Office:

607 28 ¼ Road, Suite 110
Grand Junction, CO 81506
Phone: 970-683-5447

+ For any questions or comments regarding this permit.

OPERATOR CERTIFICATION:

I hereby certify that Mesa Energy Partners, LLC and its contractors and sub-contractors are responsible for the operations conducted under this application subject to the terms and conditions of the mineral lease. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Mesa Energy Partners, LLC under their nationwide bond, BLM Bond No. COB004929.

I hereby certify that I, or someone under my direct supervision, have inspected the drill site 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.

April 28, 2011

Revised

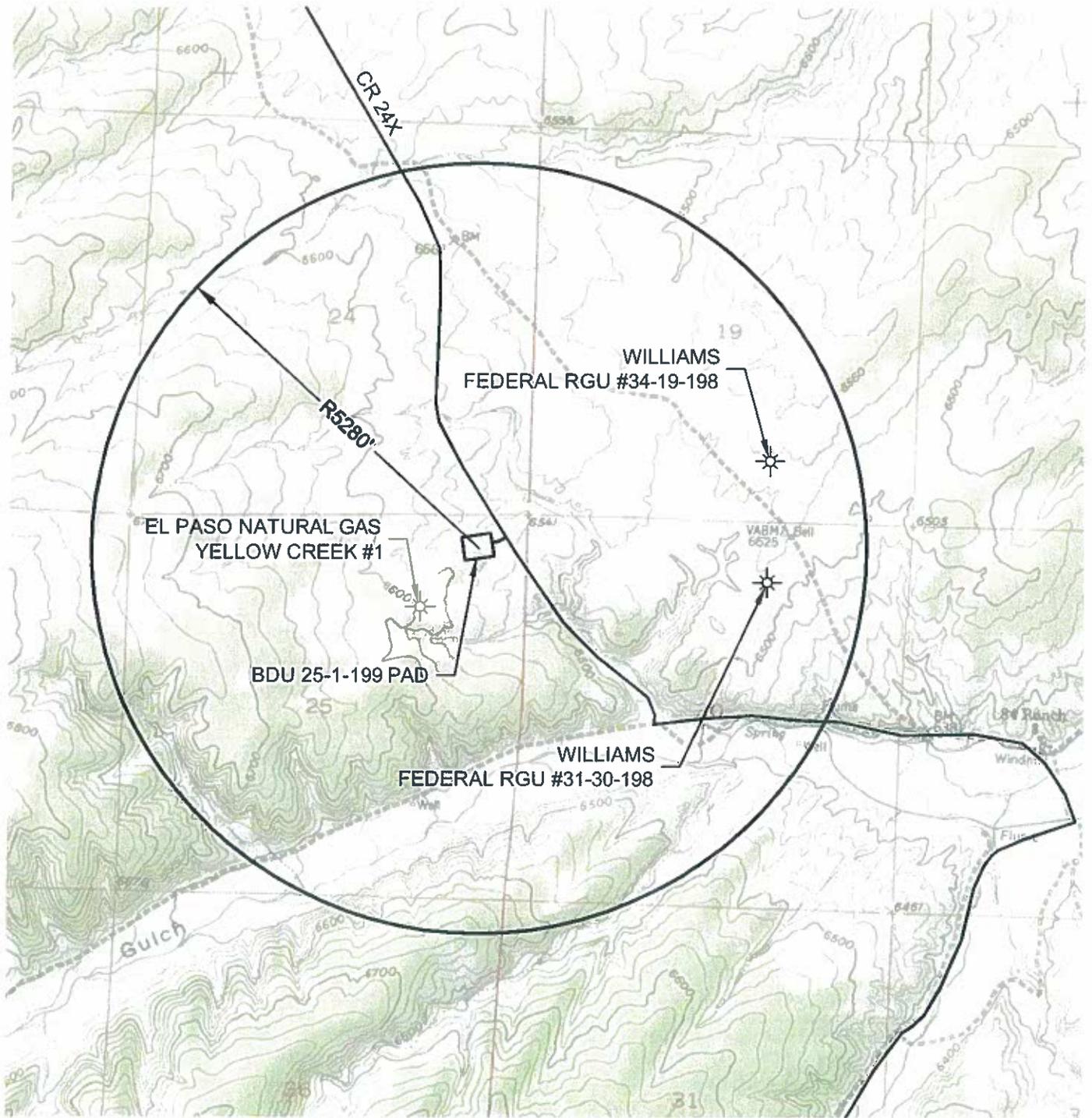


David F. Banko

Permit Agent for Mesa Energy Partners, LLC

WELL VICINITY MAP

BDU 25-1-199 PAD



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DATE: Apr 27, 2011 8:24am



11 OF 12 4/27/11

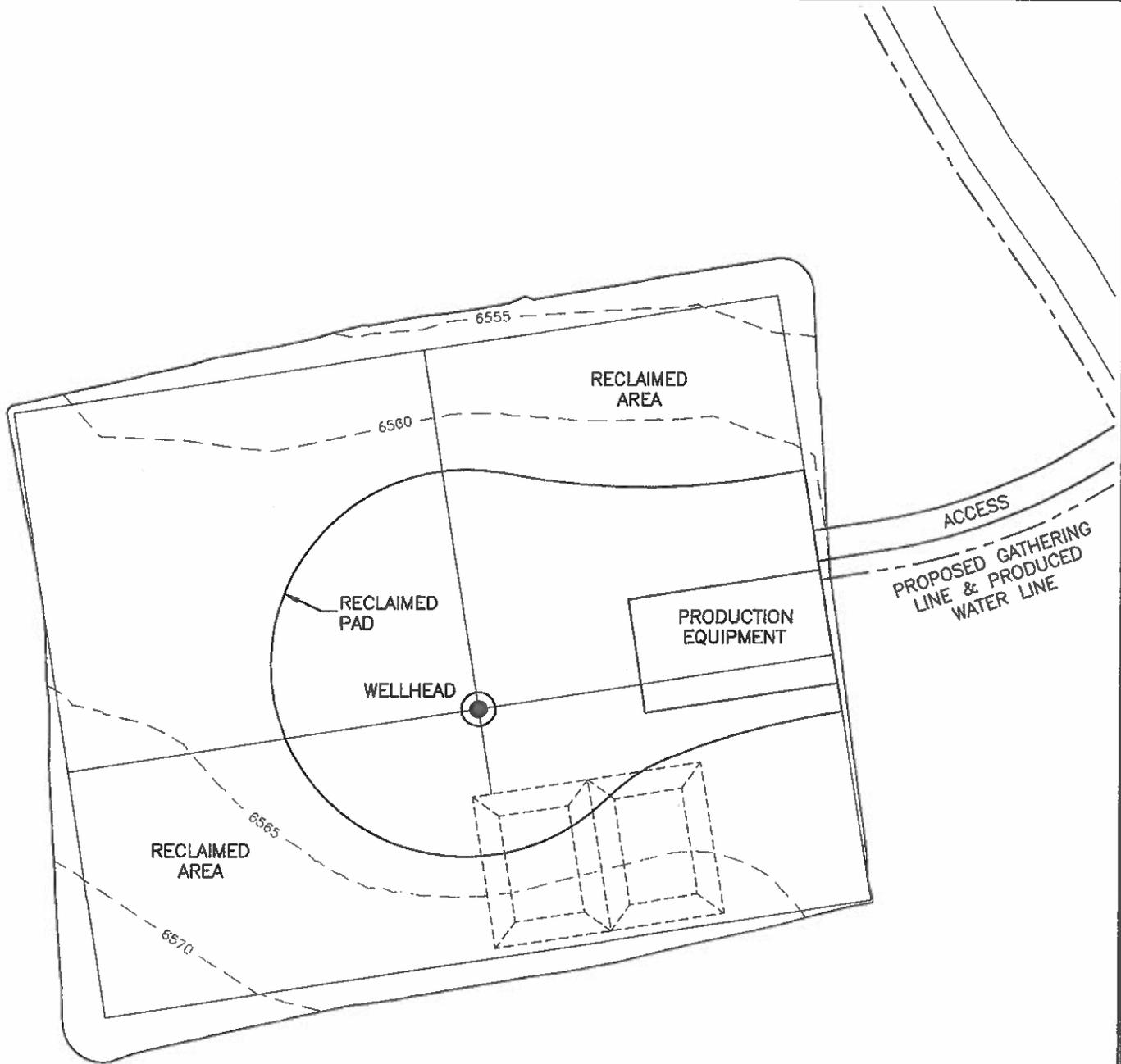

LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 666 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

PRODUCTION SCHEMATIC

BDU 25-1-199 PAD



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DATE: Apr 27, 2011 8:21am



North



Graphic Scale in Feet
1 Inch = 80 feet

DISTURBANCE ACREAGE:
5.6± DRILLING OPERATIONS
1.2± INTERIM RECLAIM

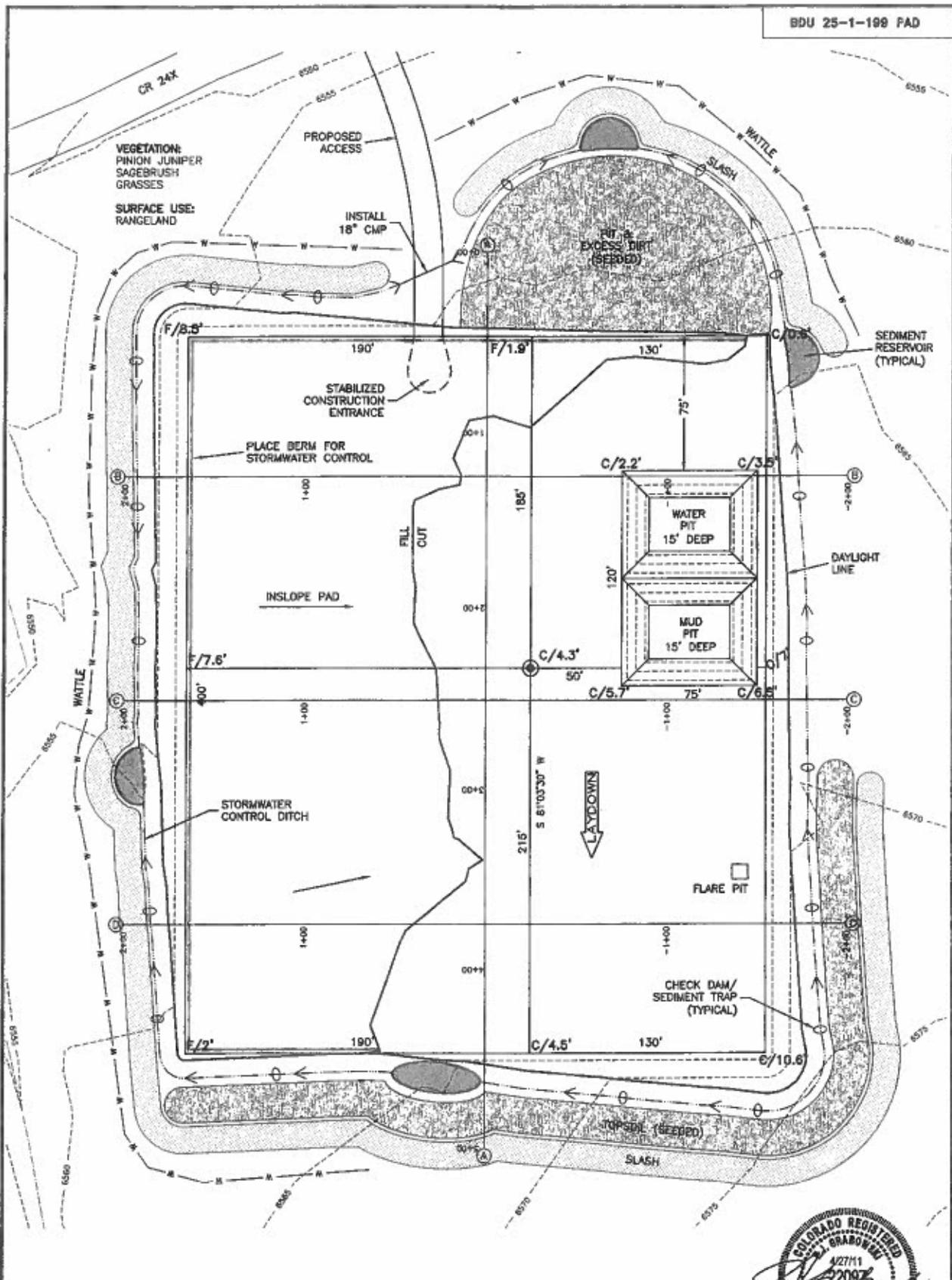
7 OF 12 4/27/11



LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 886 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO



PAD 320'X400' ELEV=6563.0'

DISTURBED AREA=5.6± ACRES

ESTIMATED DIRT QUANTITIES

CUTx10%	FILL	PIT	TOPSOIL	EXCESS
11,440	8,720	3,390	2,670	50

NOTE: VOLUMES IN CUBIC YARDS. TOPSOIL INCLUDED IN VOLUMES AT A DEPTH OF 6". PIT NOT INCLUDED IN TOTAL EXCESS.



- NOTE:
- 1) 10% ALLOWANCE IS MADE FOR SOIL EXPANSION.
 - 2) 75'X120'X15' DEEP PIT.



4/27/11

GEO SURV
 LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 303 686 0379 Fx 303 686 6320

MESA ENERGY PARTNERS, LLC
 BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
 6th PM RIO BLANCO COUNTY COLORADO

PROPOSED PIPELINE MAP

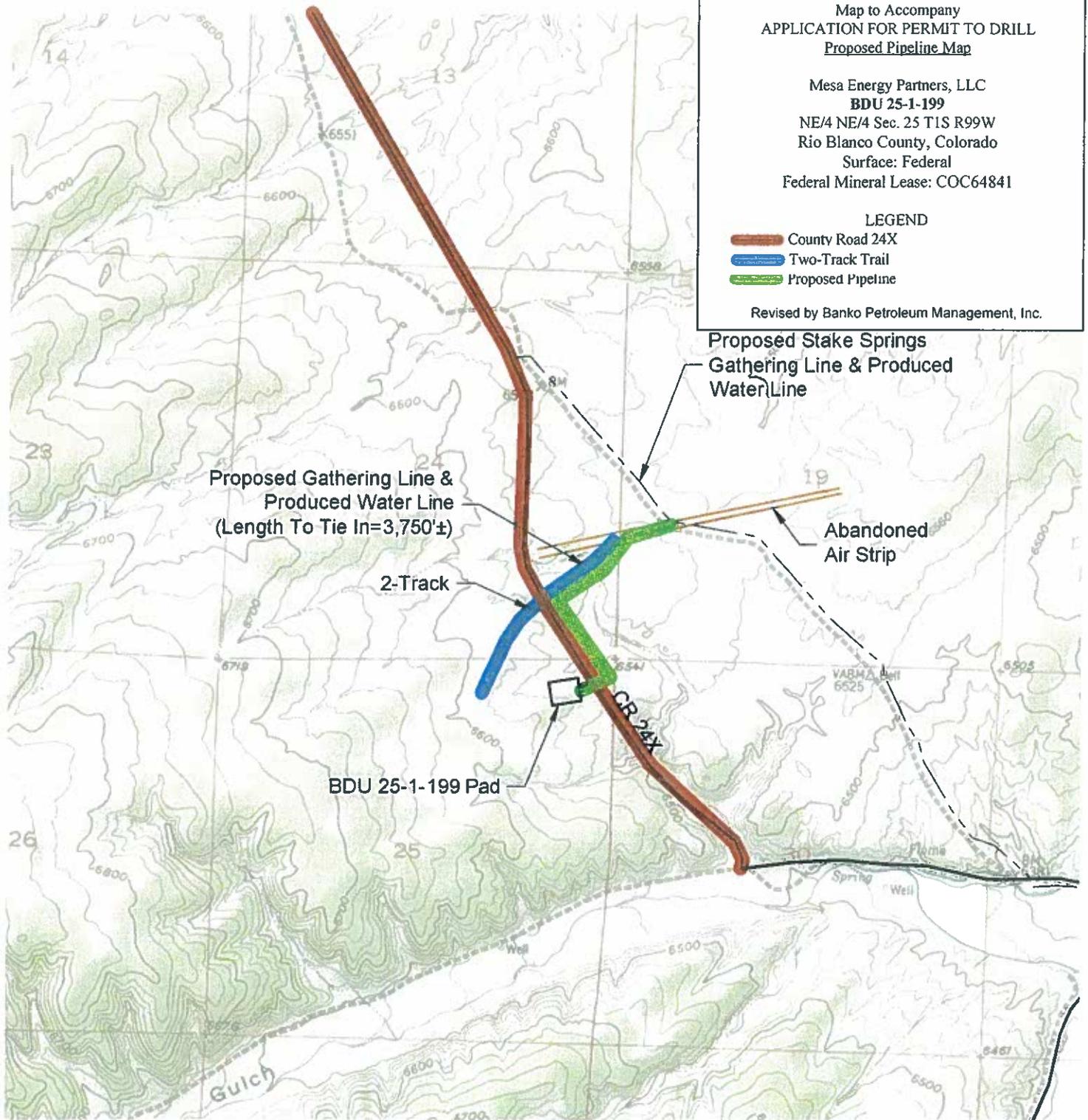
BDU 25-1-199 PAD

Map to Accompany
APPLICATION FOR PERMIT TO DRILL
Proposed Pipeline Map

Mesa Energy Partners, LLC
BDU 25-1-199
NE/4 NE/4 Sec. 25 T1S R99W
Rio Blanco County, Colorado
Surface: Federal
Federal Mineral Lease: COC64841

LEGEND
County Road 24X
Two-Track Trail
Proposed Pipeline

Revised by Banko Petroleum Management, Inc.



Proposed Gathering Line & Produced Water Line
(Length To Tie In=3,750'±)

Proposed Stake Springs
Gathering Line & Produced
Water Line

Abandoned
Air Strip

BDU 25-1-199 Pad



North



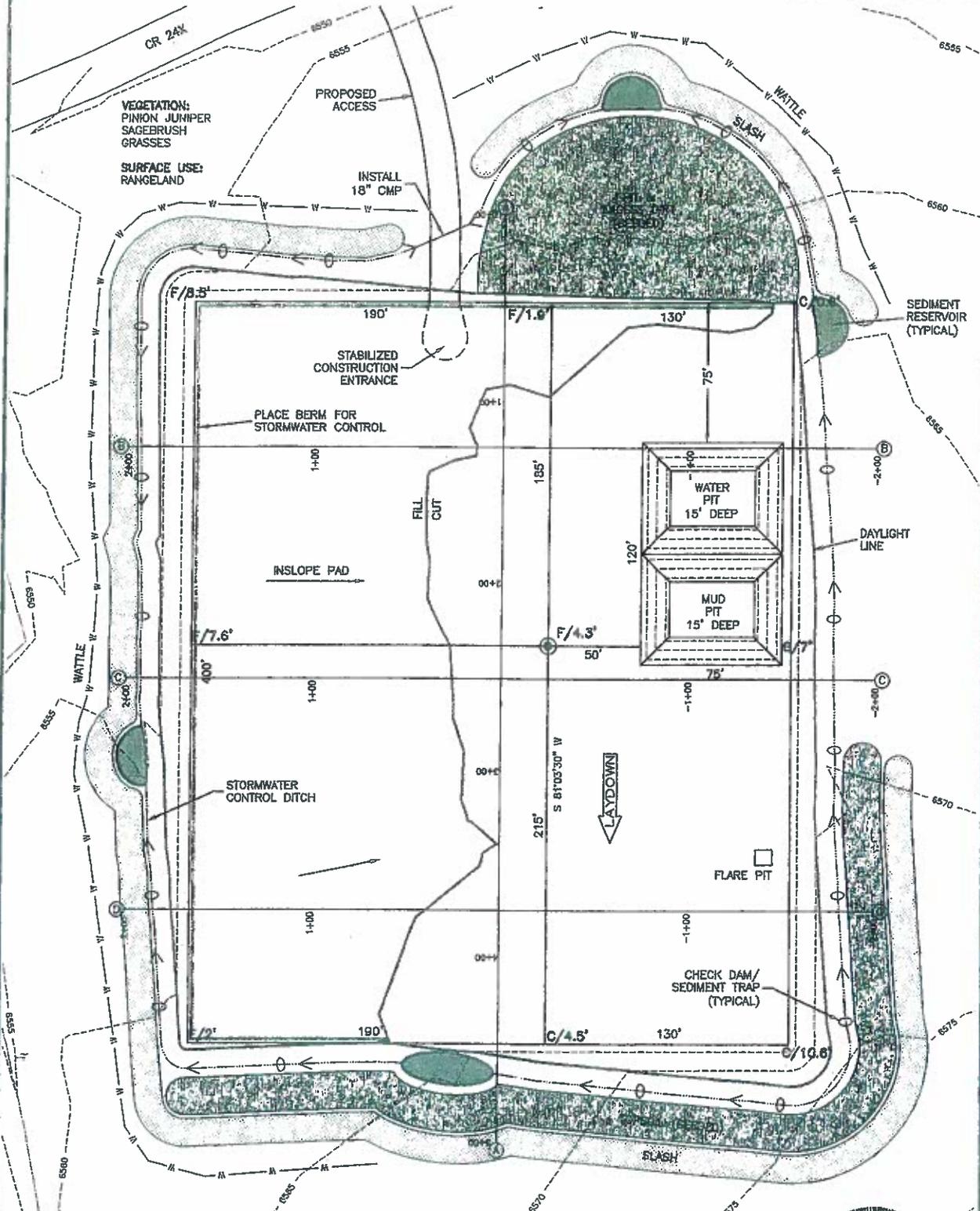
12 OF 12 4/6/11



LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 666 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO



PAD 320'X400' ELEV=6563.0'
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CUTx10%	FILL	PIT	TOPSOIL	EXCESS
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- NOTE:
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 - 2) 75'X120'X15' DEEP PIT.



11/11/11

GEO SURV
 LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 930 666 0379 Fx 930 666 0320

MESA ENERGY PARTNERS, LLC
 BDU 25-1-199
 NE1/4 NE1/4 SEC. 25 T1S R99W
 6th PM RIO BLANCO COUNTY COLORADO

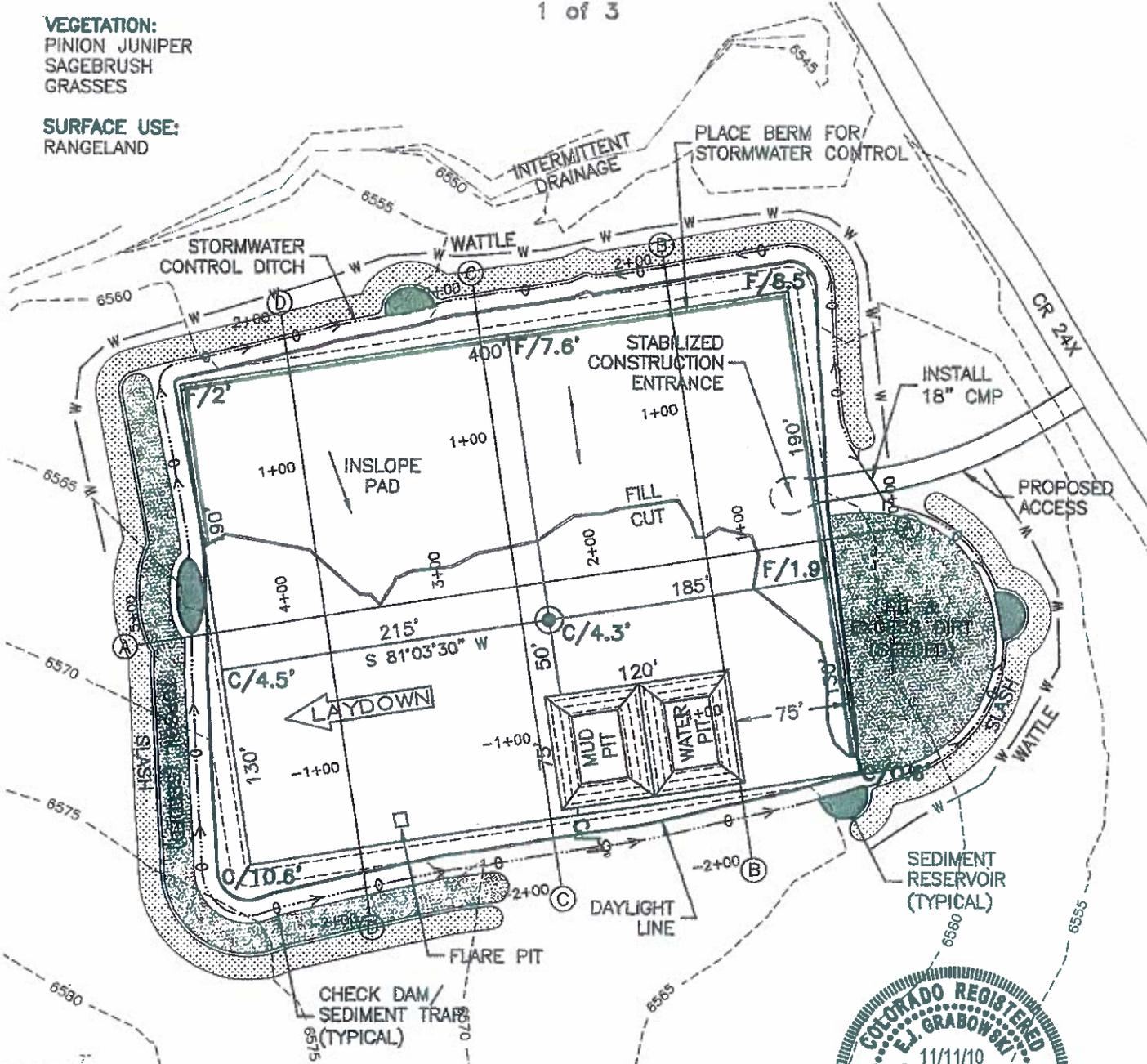
2/24/2011

CONSTRUCTION LAYOUT DRAWING

1 of 3

VEGETATION:
PINION JUNIPER
SAGEBRUSH
GRASSES

SURFACE USE:
RANGELAND



PAD 320'X400' ELEV=6563.0'				
DISTURBED AREA=5.6± ACRES				
ESTIMATED DIRT QUANTITIES				
CUTx10%	FILL	PIT	TOPSOIL	EXCESS
11,440	8,720	3,390	2,670	50
NOTE: VOLUMES IN CUBIC YARDS. TOPSOIL INCLUDED IN VOLUMES AT A DEPTH OF 6". PIT NOT INCLUDED IN TOTAL EXCESS.				



NOTE:
1) 10% ALLOWANCE IS MADE FOR SOIL EXPANSION.
2) 75'X120'X15' DEEP PIT.

5 OF 7 11/11/10



GEO SURV
LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 866 0379 Fx 303 665 6320

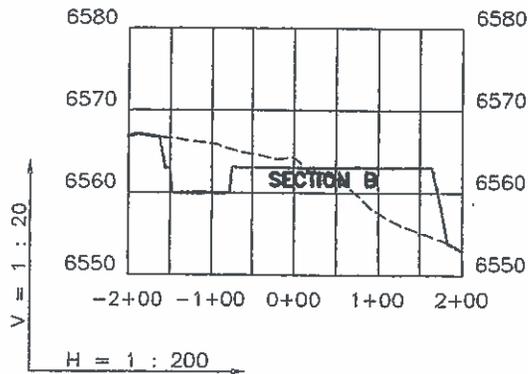
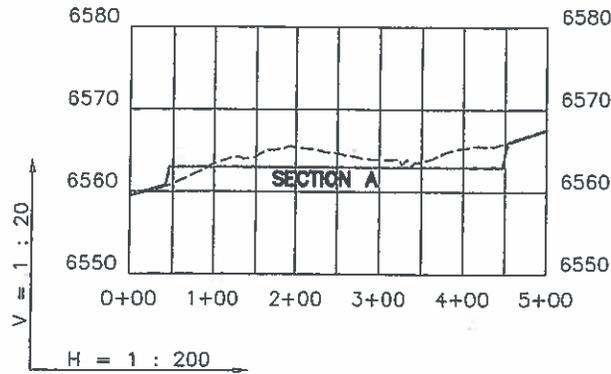
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BDU 25-1-199
NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

2/24/2011

DATE: Nov 11, 2010 8:38am
USER: Owner
DRAWN BY: E.J. Grabowski
PROJECT: BDU 25-1-199 F24 R2.dwg

CONSTRUCTION LAYOUT DRAWING

2 of 3



6 OF 7 11/11/10

----- Existing Ground
 _____ Proposed Grade

GEO SURV

LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 303 666 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
 BDU 25-1-199

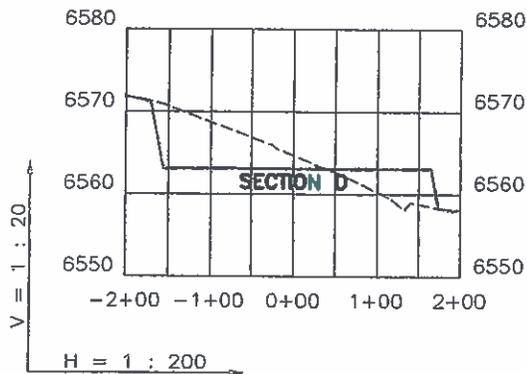
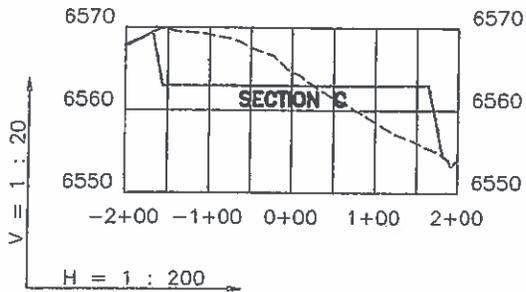
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 6th PM RIO BLANCO COUNTY COLORADO

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2/24/2011

CONSTRUCTION LAYOUT DRAWING

3 of 3



7 OF 7 11/11/10

----- Existing Ground
 _____ Proposed Grade

GEO SURV
 LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 303 688 0379 Fx 303 685 6320

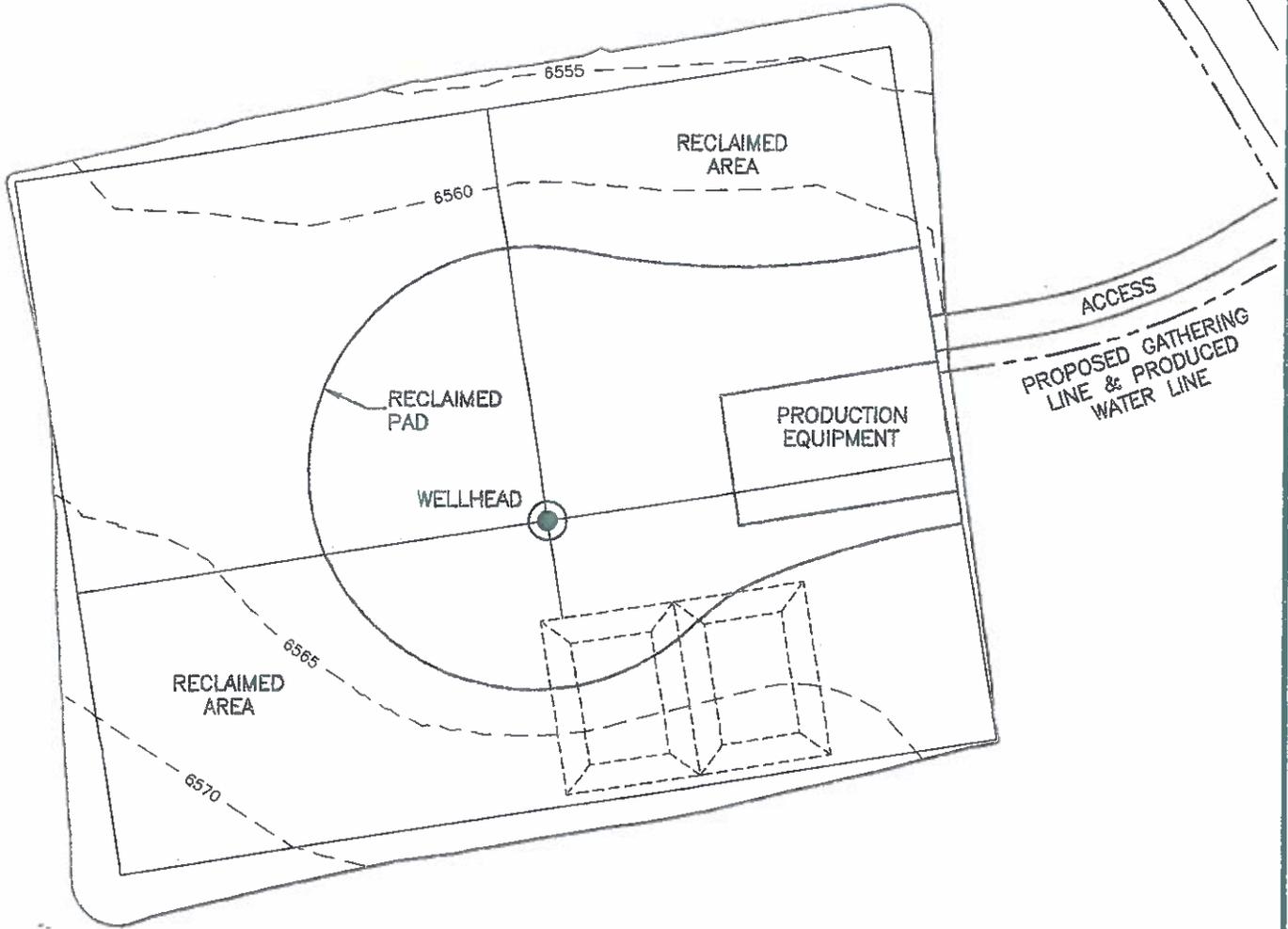
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 BDU 25-1-199
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 6th PM RIO BLANCO COUNTY COLORADO

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2/24/2011

PRODUCTION SCHEMATIC

BDU 25-1-199 PAD



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DISTURBANCE ACREAGE:
5.6± DRILLING OPERATIONS
1.2± INTERIM RECLAIM

7 OF 12 11/11/10

GEO SURV
LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 686 0379 Fx 303 685 6320

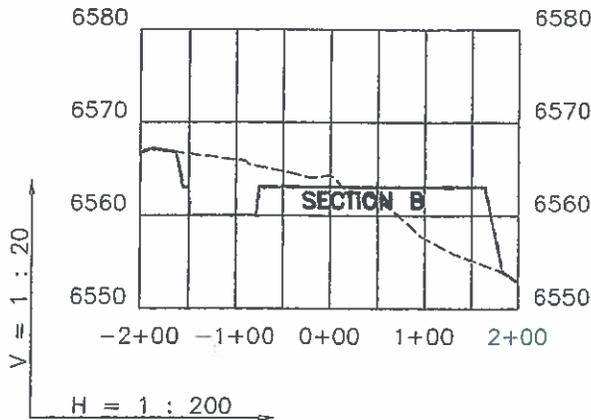
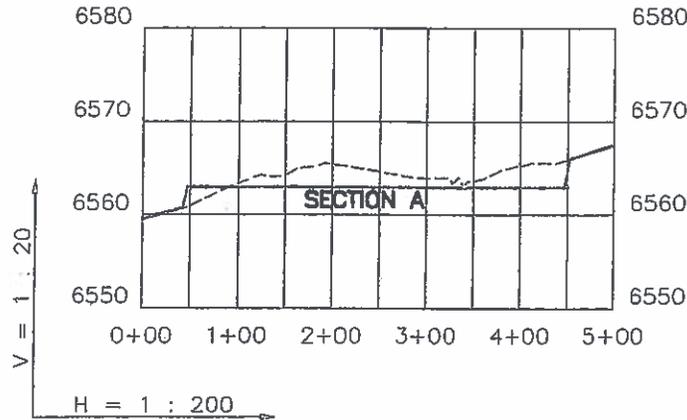
MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

2/24/2011

CROSS SECTIONS A & B

BDU 25-1-199 PAD



4 OF 12 11/11/10

----- Existing Ground
 _____ Proposed Grade

GEO SURV
 LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 303 686 0379 Fx 303 685 6320

MESA ENERGY PARTNERS, LLC
 BDU 25-1-199

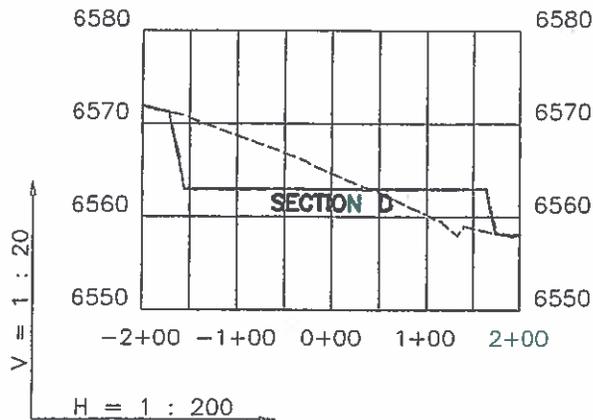
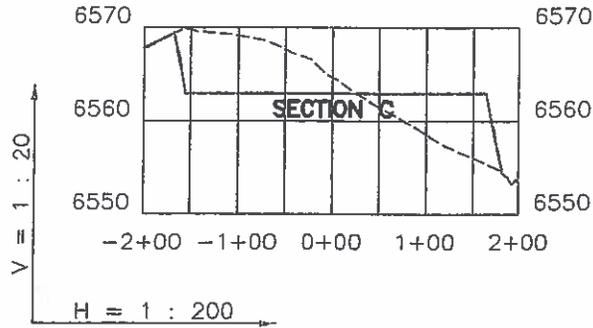
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 6th PM RIO BLANCO COUNTY COLORADO

2/24/2011

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CROSS SECTIONS C & D

BDU 25-1-199 PAD



----- Existing Ground
 _____ Proposed Grade

GEO SURV
 LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 303 666 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
 BDU 25-1-199

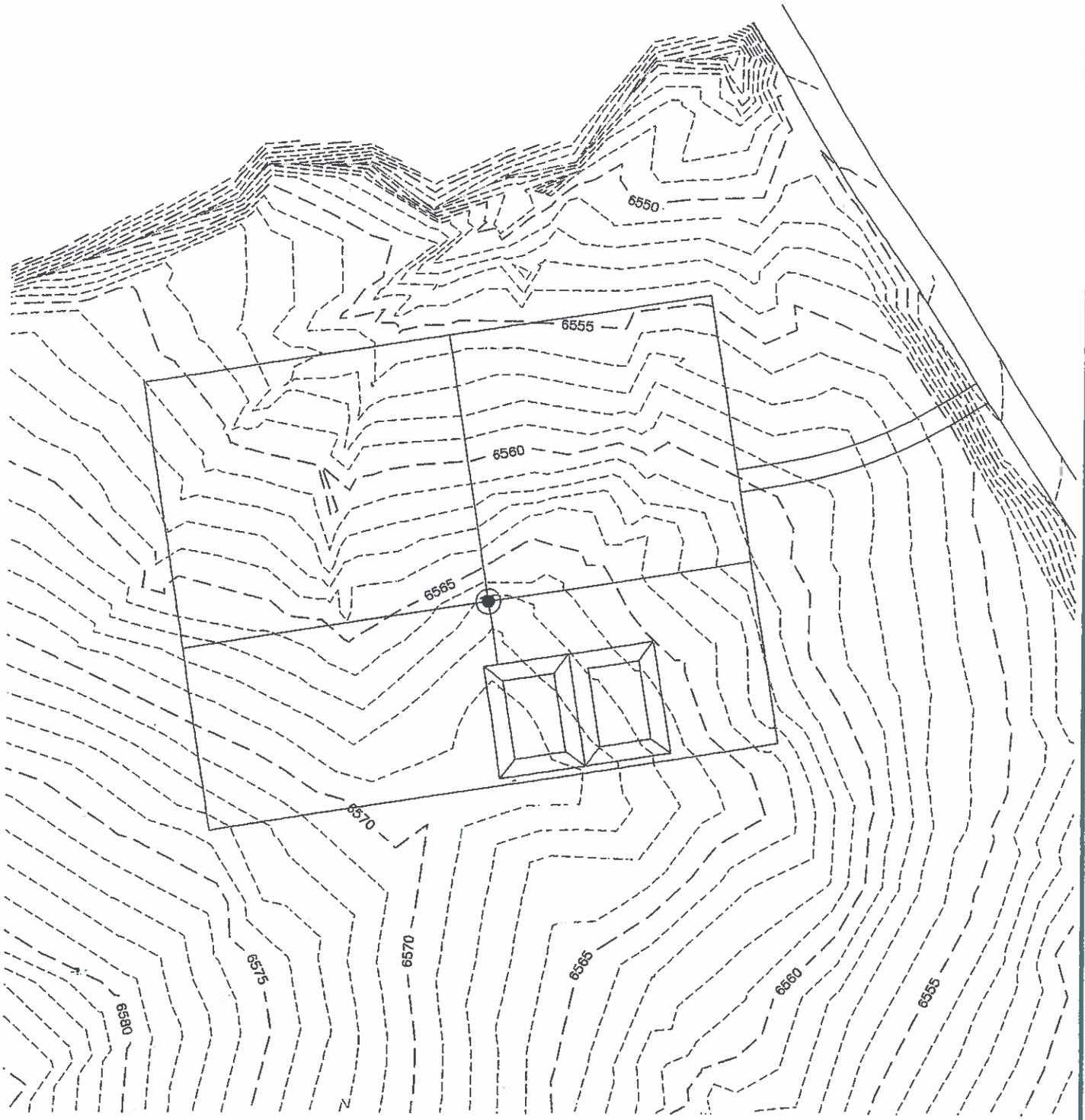
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 6th PM RIO BLANCO COUNTY COLORADO

2/24/2011

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EXISTING CONTOURS

BDU 25-1-199 PAD



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North



Graphic Scale in Feet
1 inch = 100 feet

3 OF 12 11/11/10

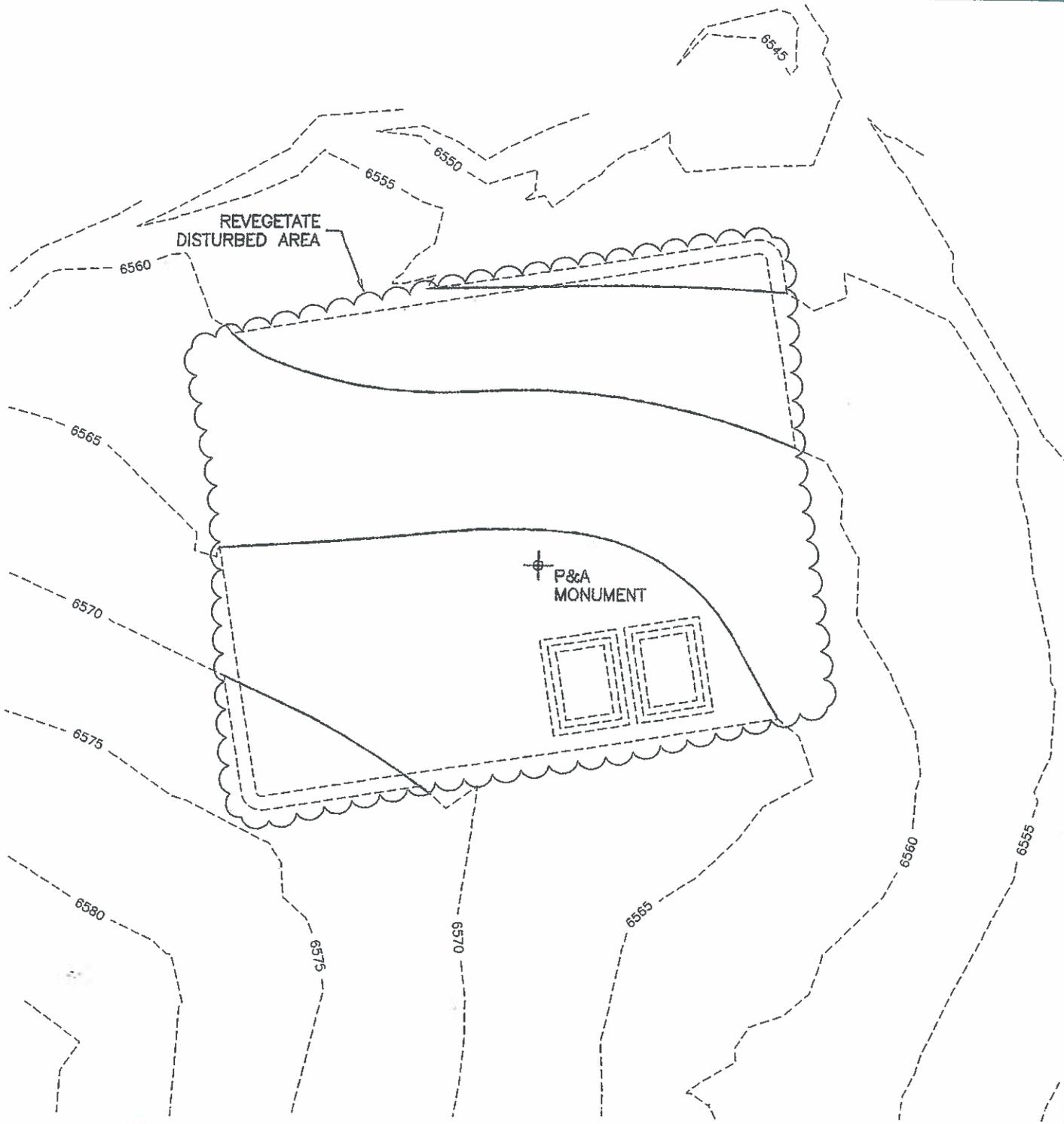
GEO SURV
LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 686 0379 Fx 303 685 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199
NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

2/24/2011

FINAL ABANDONMENT

BDU 25-1-199 PAD



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USER: chmar
DATE: Nov 11, 2010 9:05am



North



Graphic Scale in Feet
1 inch = 100 feet

8 OF 12 11/11/10

GEO SURV
LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 686 0379 Fx 303 685 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

2/24/2011

ACCESS ROAD MAP

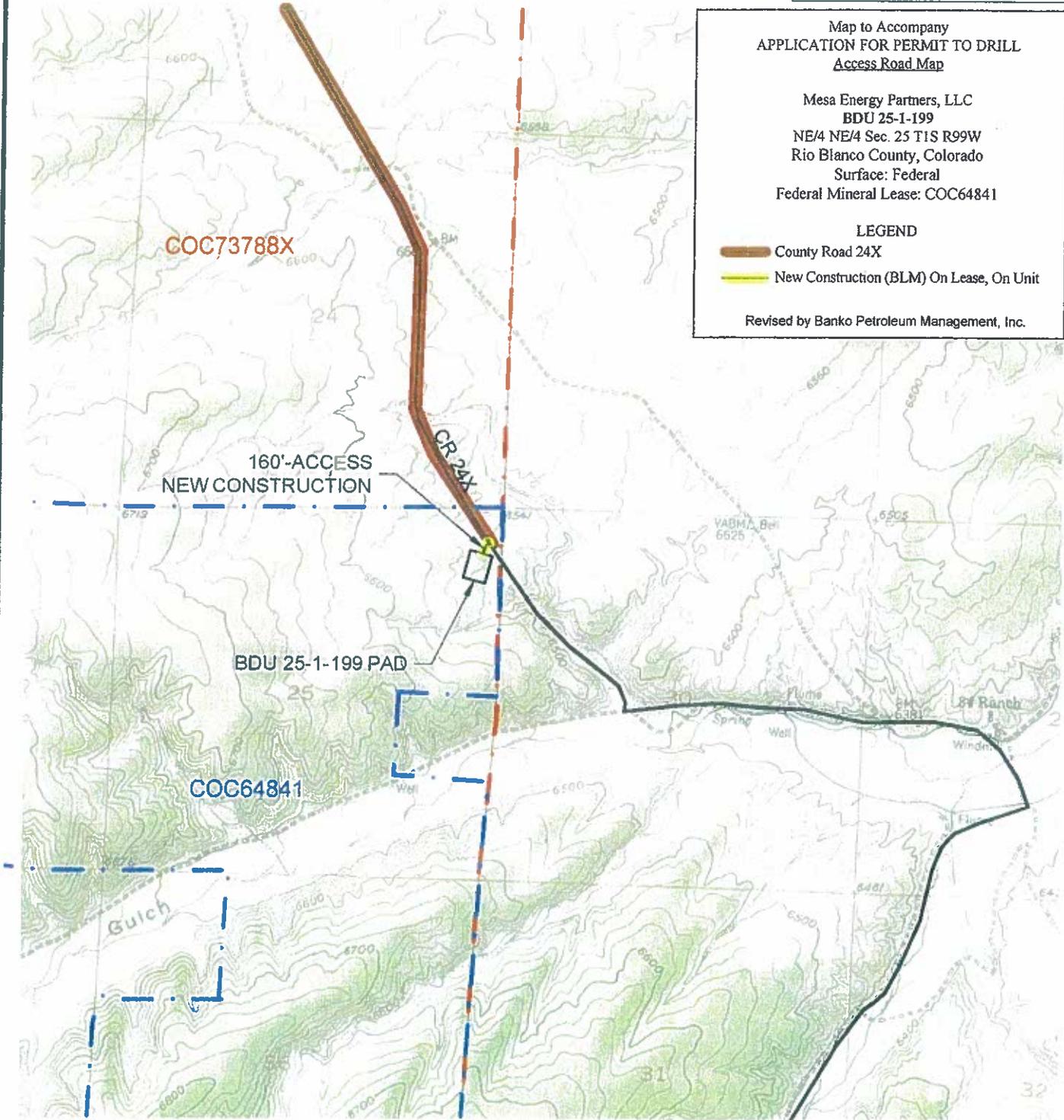
BDU 25-1-199 PAD

Map to Accompany
APPLICATION FOR PERMIT TO DRILL
Access Road Map

Mesa Energy Partners, LLC
BDU 25-1-199
NE/4 NE/4 Sec. 25 T1S R99W
Rio Blanco County, Colorado
Surface: Federal
Federal Mineral Lease: COC64841

LEGEND
County Road 24X
New Construction (BLM) On Lease, On Unit

Revised by Banko Petroleum Management, Inc.



North



Graphic Scale in Feet
1 inch = 2000 feet



LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 666 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

9 OF 12 6/23/10

DWG: c:\geosurv\3010\10022\resplora\BDU 25-1-199\BDU 25-1-199 Plat R1.dwg USER: Dmccr DATE: Jun 23, 2010 2:28pm

2/24/2011

VICINITY MAP

BDU 25-1-199 PAD

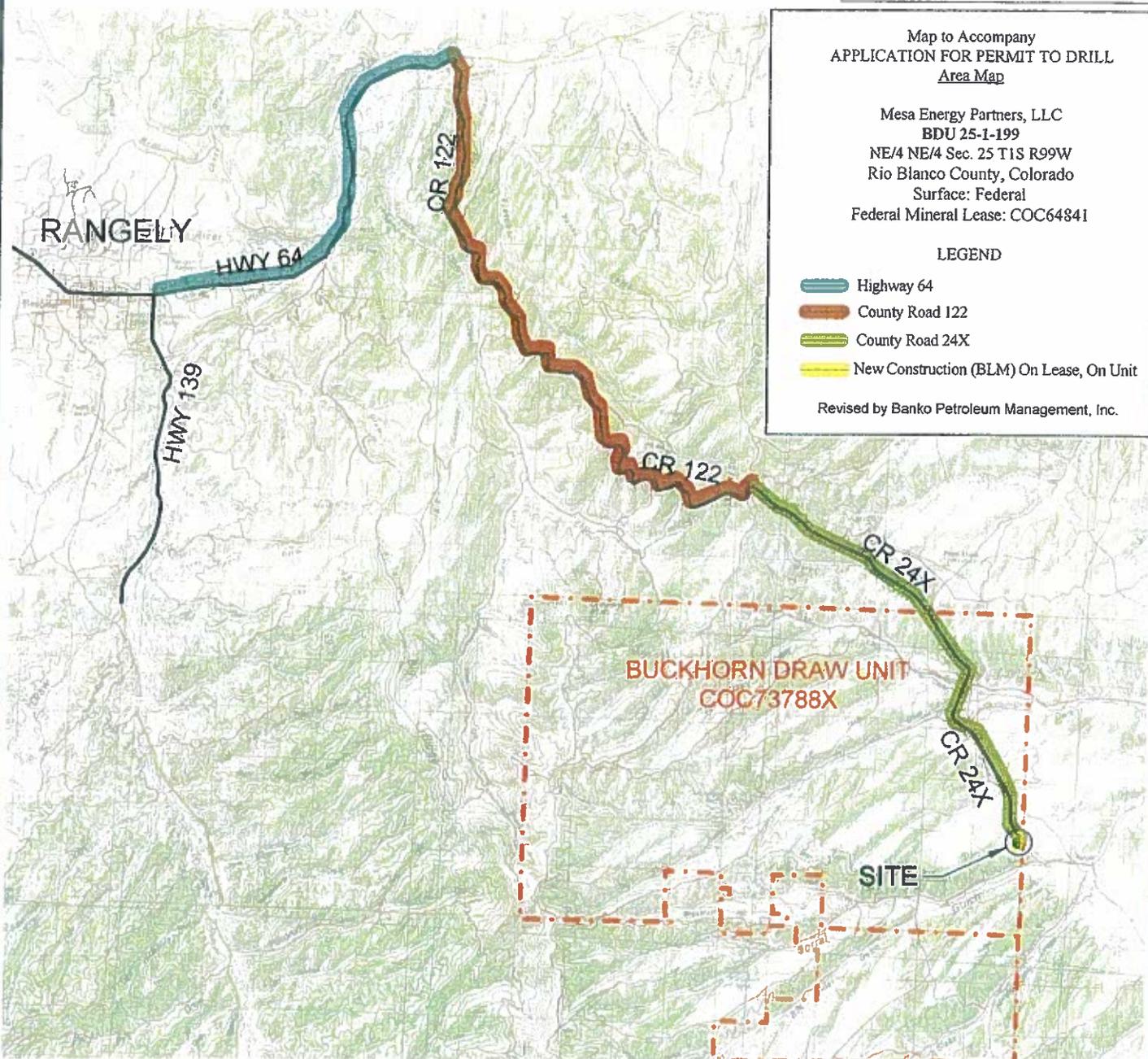
Map to Accompany
APPLICATION FOR PERMIT TO DRILL
Area Map

Mesa Energy Partners, LLC
BDU 25-1-199
NE/4 NE/4 Sec. 25 T1S R99W
Rio Blanco County, Colorado
Surface: Federal
Federal Mineral Lease: COC64841

LEGEND

-  Highway 64
-  County Road 122
-  County Road 24X
-  New Construction (BLM) On Lease, On Unit

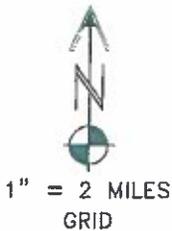
Revised by Banko Petroleum Management, Inc.



DRIVING DIRECTIONS:

- MP 0.0 - Intersection of Highway 64 & Highway 139; East on Highway 64
- MP 9.1 - Right on CR 122, South along CR 122
- MP 25.5 - Intersection CR 122 & CR 24X; Continue straight on CR 24X
- MP 33.3 - Right on access onto BDU 25-1-199 Pad

10 OF 12 6/23/10




LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 666 0379 Fx 303 666 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

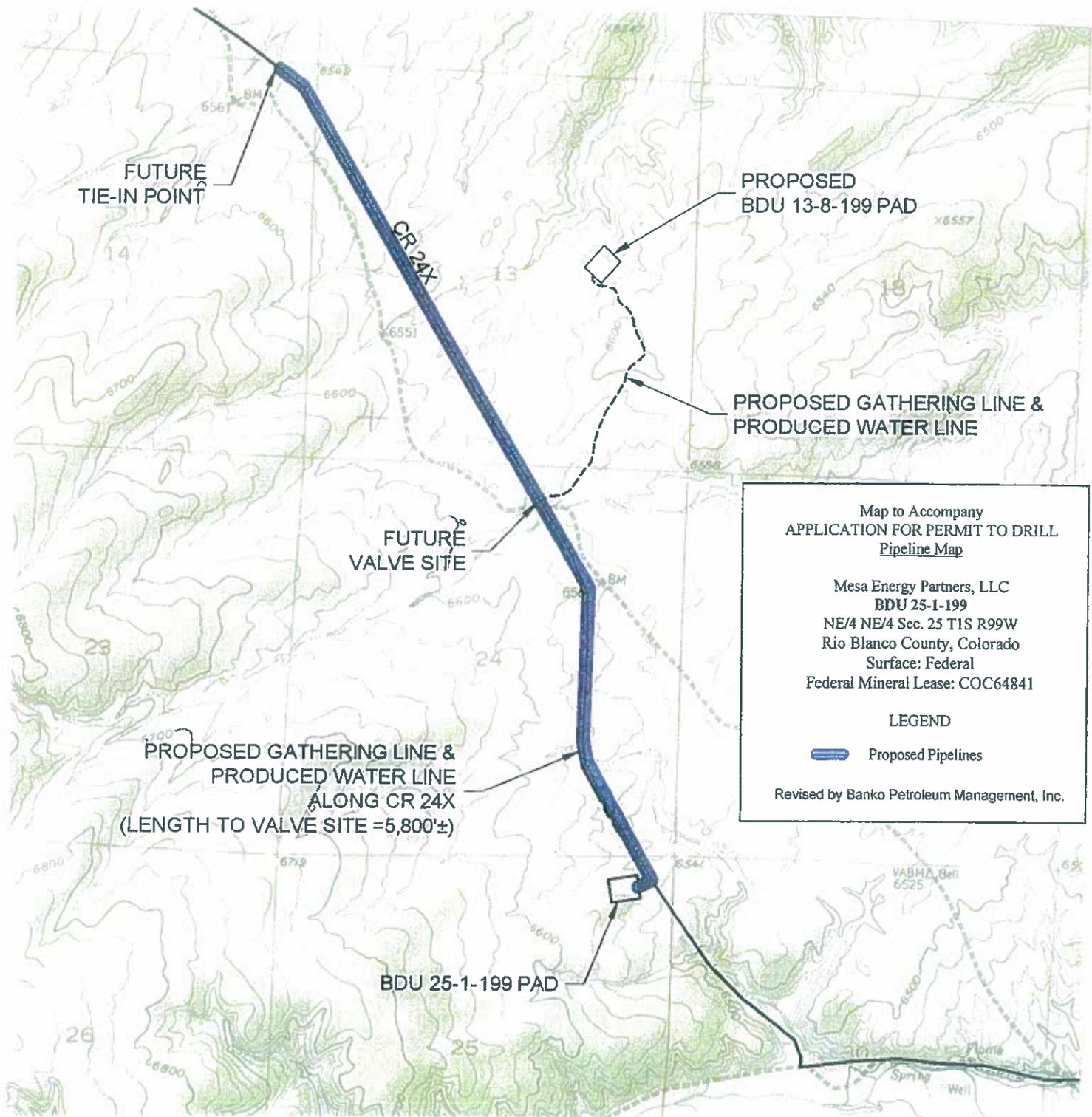
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6th PM RIO BLANCO COUNTY COLORADO

2/24/2011

DATE: Jun 23 2010 2:27pm
USER: Owner
C:\GEO SURV\2010\10022\MapInfo\BDU 25-1-199 PAD R1.dwg

PROPOSED PIPELINE MAP

BDU 25-1-199 PAD



Map to Accompany
 APPLICATION FOR PERMIT TO DRILL
Pipeline Map

Mesa Energy Partners, LLC
 BDU 25-1-199
 NE/4 NE/4 Sec. 25 T1S R99W
 Rio Blanco County, Colorado
 Surface: Federal
 Federal Mineral Lease: COC64841

LEGEND

Proposed Pipelines

Revised by Banko Petroleum Management, Inc.



North



Graphic Scale in Feet
 1 inch = 2000 feet

12 OF 12 11/11/10

LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 303 666 0379 Fx 303 665 6320

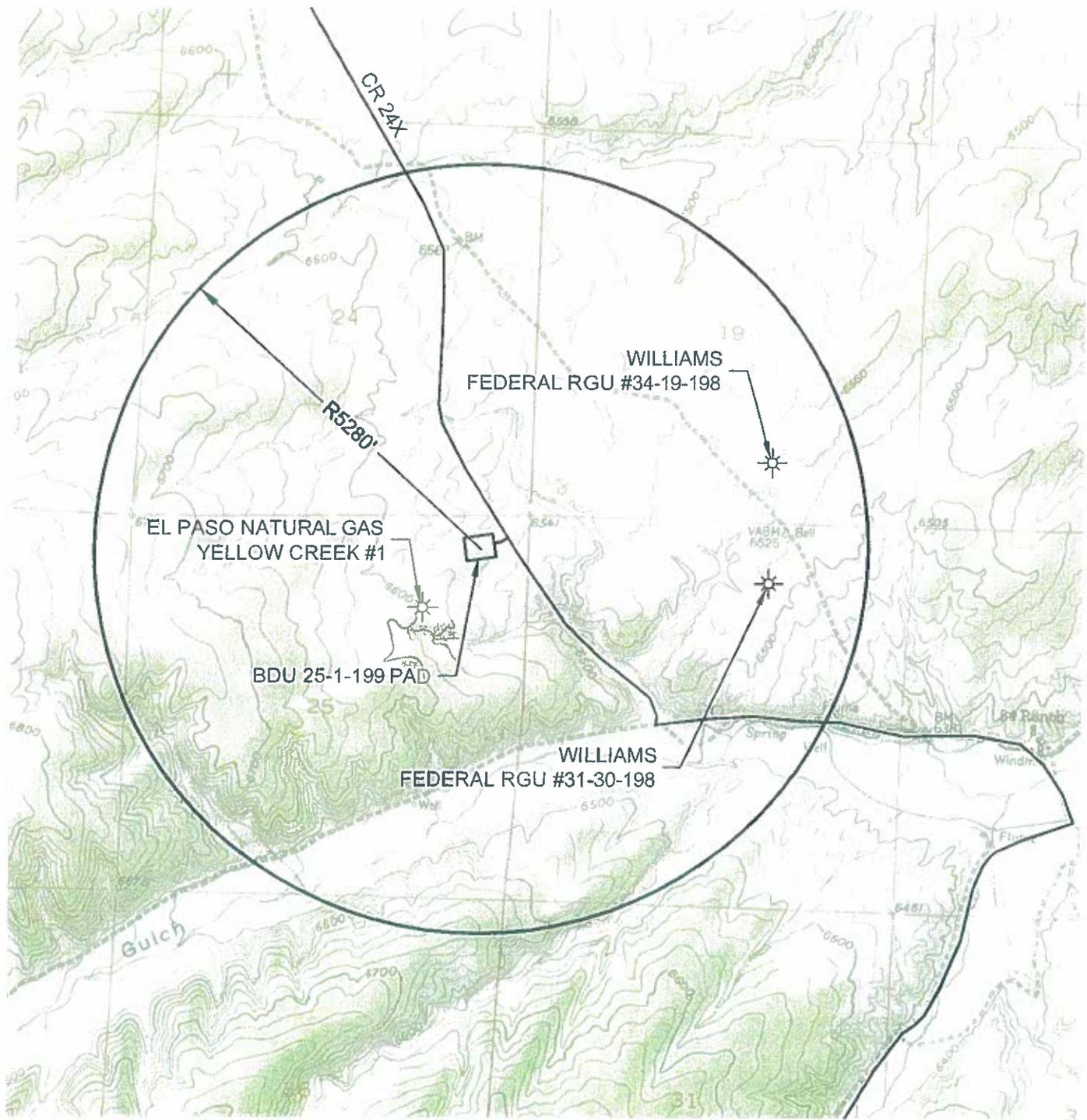
MESA ENERGY PARTNERS, LLC
 BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

2/24/2011

WELL VICINITY MAP

BDU 25-1-199 PAD



DWG: G:\GEO SURV\2010\10022\Wellplan\BDU 25-1-199\BDU 25-1-199 Plot R3.dwg USER: MTC DATE: Apr 27, 2011 8:24am



North



Graphic Scale In Feet
1 Inch = 2000 feet

11 OF 12 4/27/11

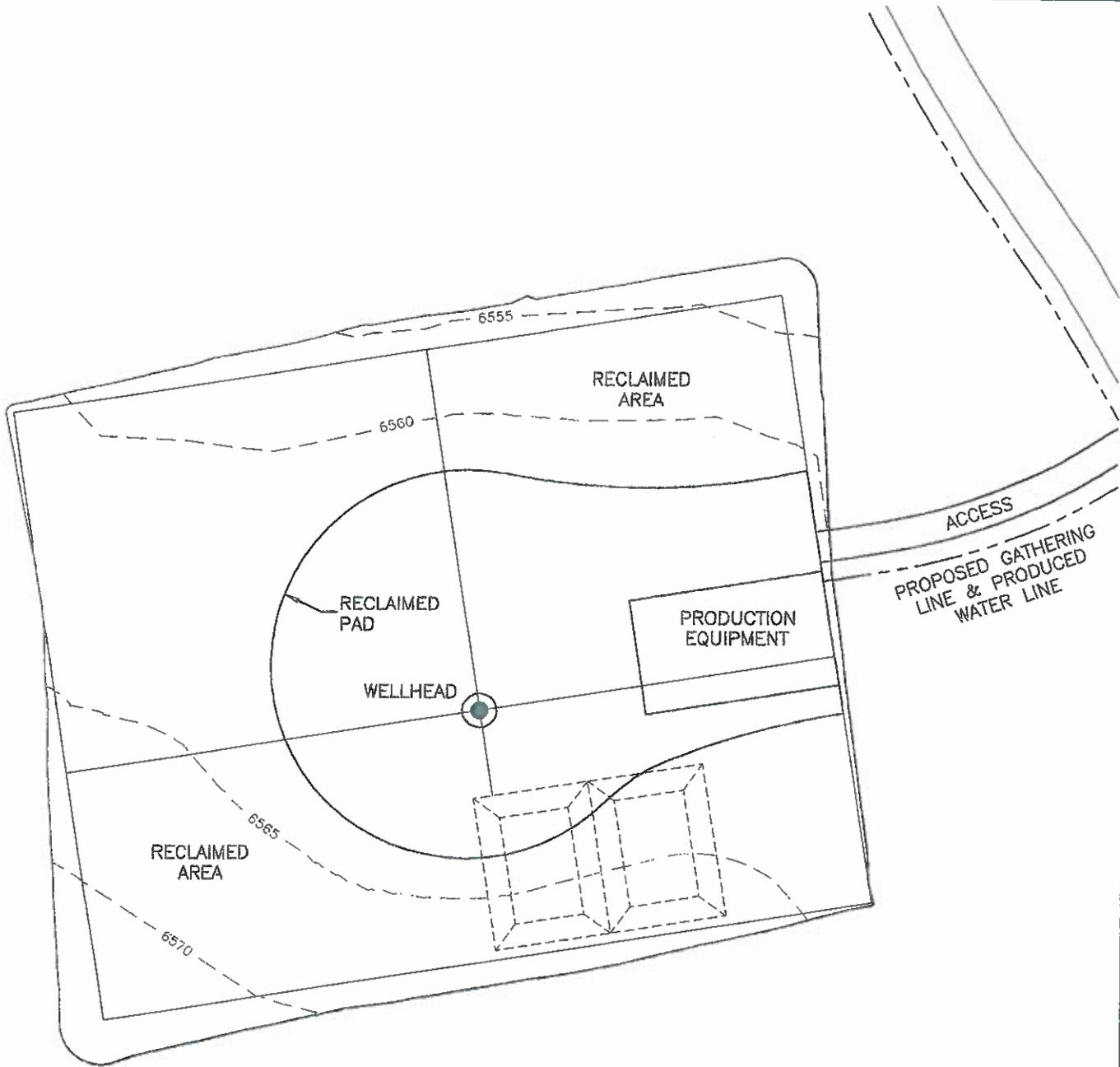
GEO SURV
LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 666 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

PRODUCTION SCHEMATIC

BDU 25-1-199 PAD



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North



Graphic Scale In Feet
1 inch = 80 feet

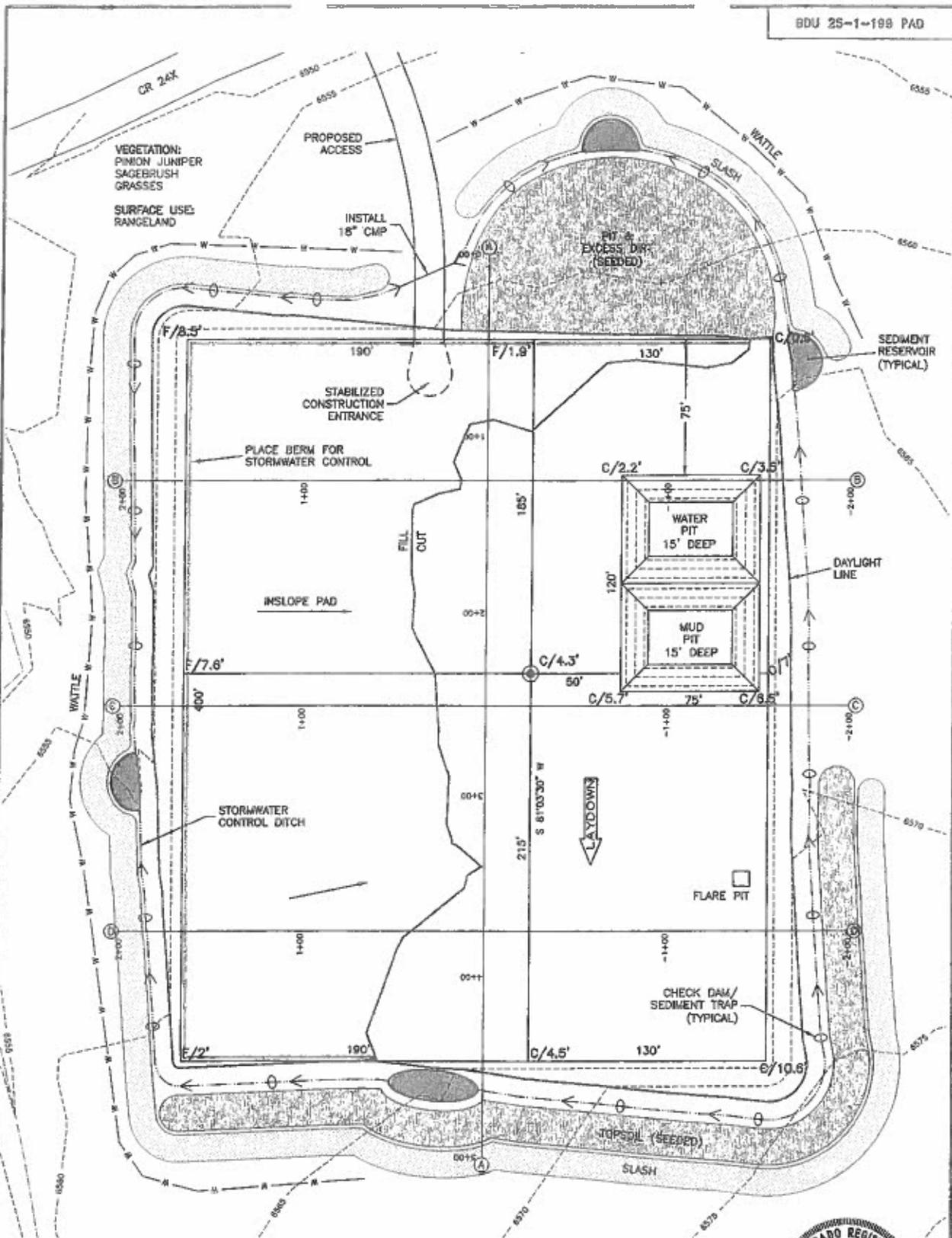
DISTURBANCE ACREAGE:
5.6± DRILLING OPERATIONS
1.2± INTERIM RECLAIM

7 OF 12 4/27/11

LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 866 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO



PAD 320'X400' ELEV=6563.0'

DISTURBED AREA=5.6± ACRES

ESTIMATED DIRT QUANTITIES

CUTx10%	FILL	PIT	TOPSOIL	EXCESS
11,440	8,720	3,390	2,670	50

NOTE: VOLUMES IN CUBIC YARDS. TOPSOIL INCLUDED IN VOLUMES AT A DEPTH OF 6". PIT NOT INCLUDED IN TOTAL EXCESS.



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 - 2) 75'X120'X15' DEEP PIT.



4/27/11

GEO SURV
 LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 303 888 0378 Fx 303 888 8320

MESA ENERGY PARTNERS, LLC
 BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
 6th PM RIO BLANCO COUNTY COLORADO

PROPOSED PIPELINE MAP

BDU 25-1-199 PAD

Map to Accompany
APPLICATION FOR PERMIT TO DRILL
Proposed Pipeline Map

Mesa Energy Partners, LLC
BDU 25-1-199
NE/4 NE/4 Sec. 25 T1S R99W
Rio Blanco County, Colorado
Surface: Federal
Federal Mineral Lease: COC64841

- LEGEND
- County Road 24X
 - Two-Track Trail
 - Proposed Pipeline

Revised by Banko Petroleum Management, Inc.

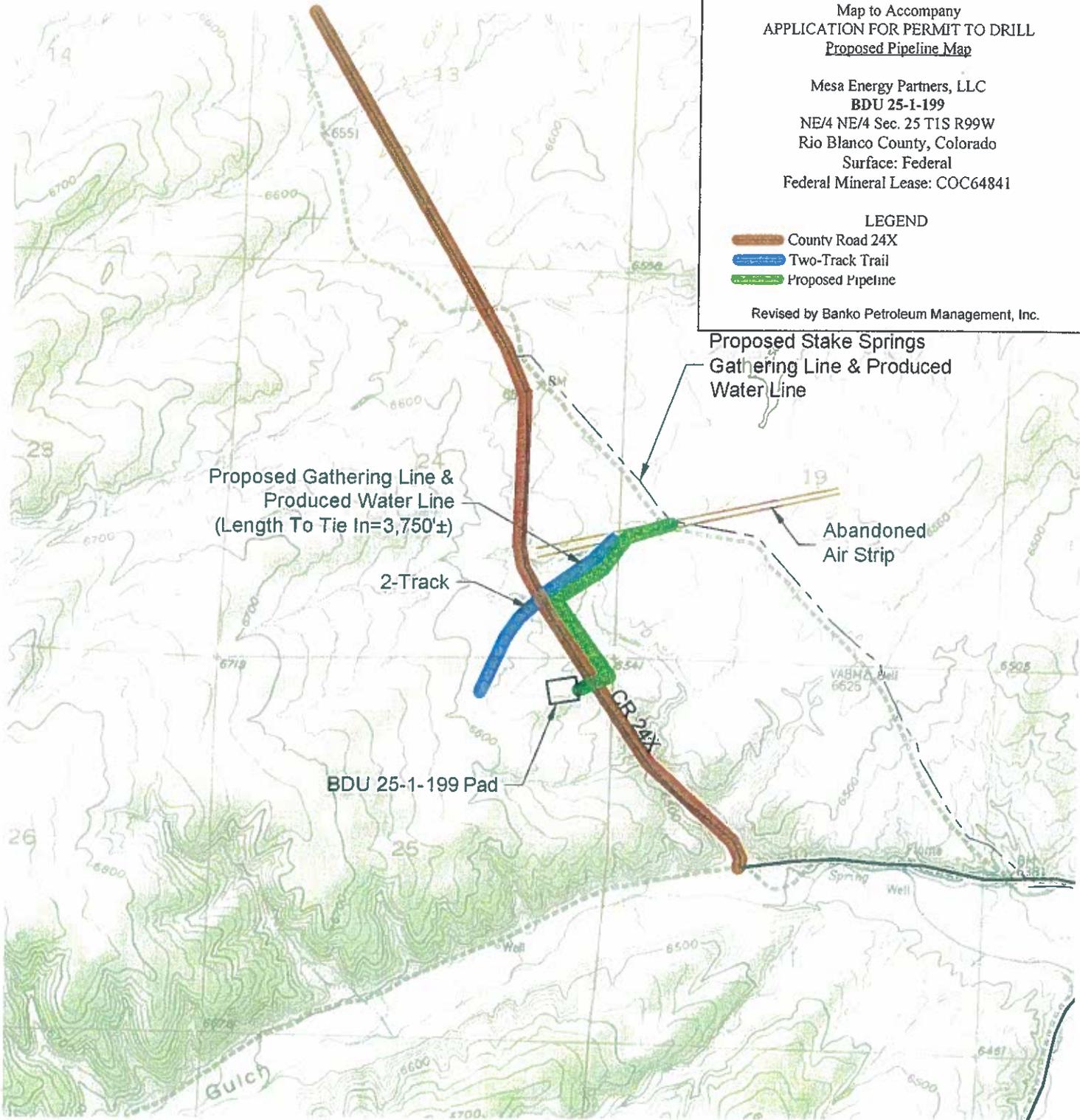
Proposed Stake Springs
Gathering Line & Produced
Water Line

Proposed Gathering Line &
Produced Water Line
(Length To Tie In=3,750'±)

2-Track

Abandoned
Air Strip

BDU 25-1-199 Pad



North



12 OF 12 4/6/11



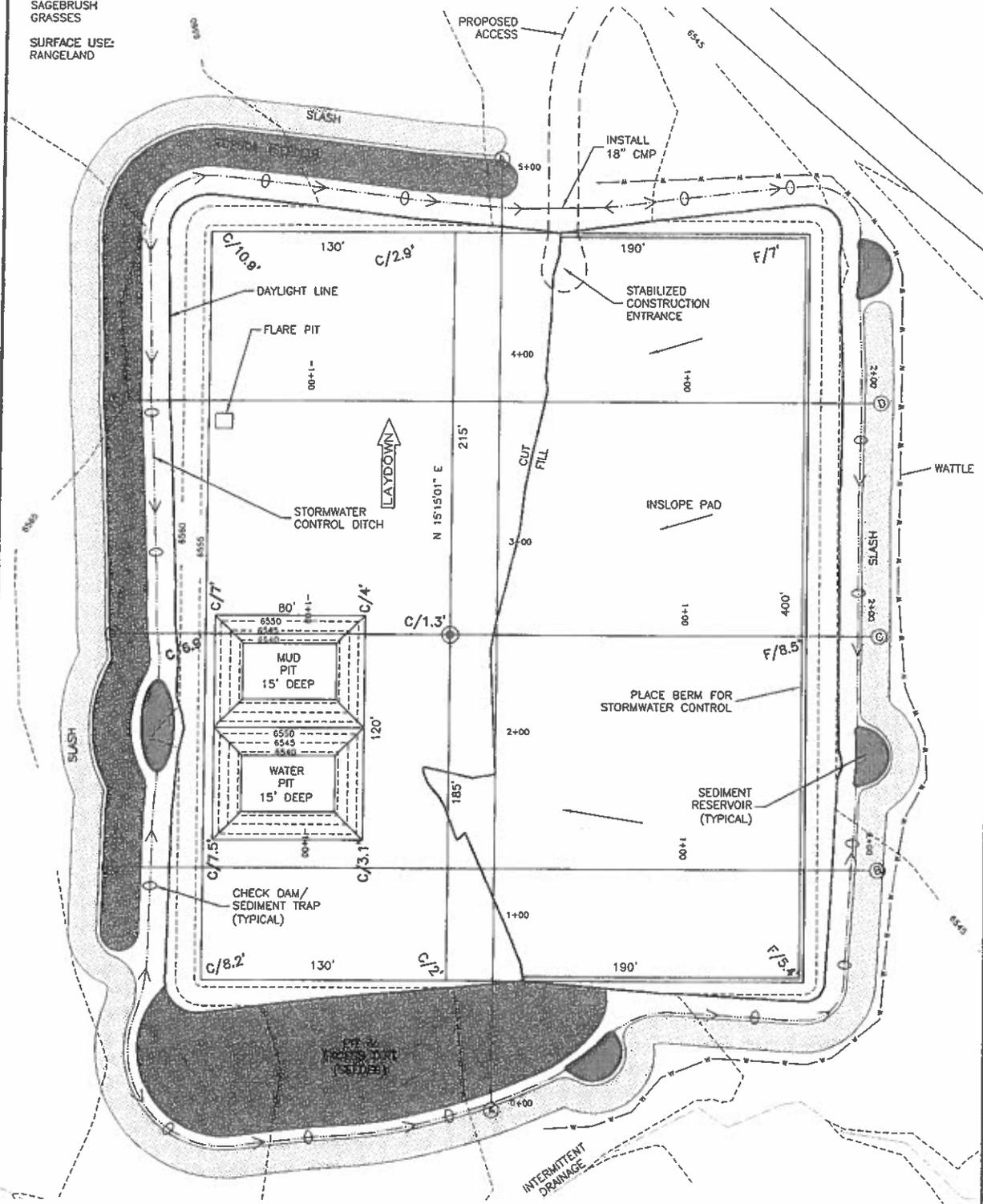
LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 666 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

VEGETATION:
PINON JUNIPER
SAGEBRUSH
GRASSES

SURFACE USE:
RANGELAND

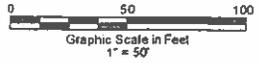


PAD 320'X400' ELEV=6553.2'
DISTURBED AREA=5.3± ACRES

ESTIMATED DIRT QUANTITIES

CUTx10%	FILL	PIT	TOPSOIL	EXCESS
13,140	10,350	3,670	2,740	50

NOTE: VOLUMES IN CUBIC YARDS. TOPSOIL INCLUDED IN VOLUMES AT A DEPTH OF 6". PIT NOT INCLUDED IN TOTAL EXCESS.



- NOTE:
- 1) 10% ALLOWANCE IS MADE FOR SOIL EXPANSION.
 - 2) 80'X120'X15' DEEP PIT.



6/22/10

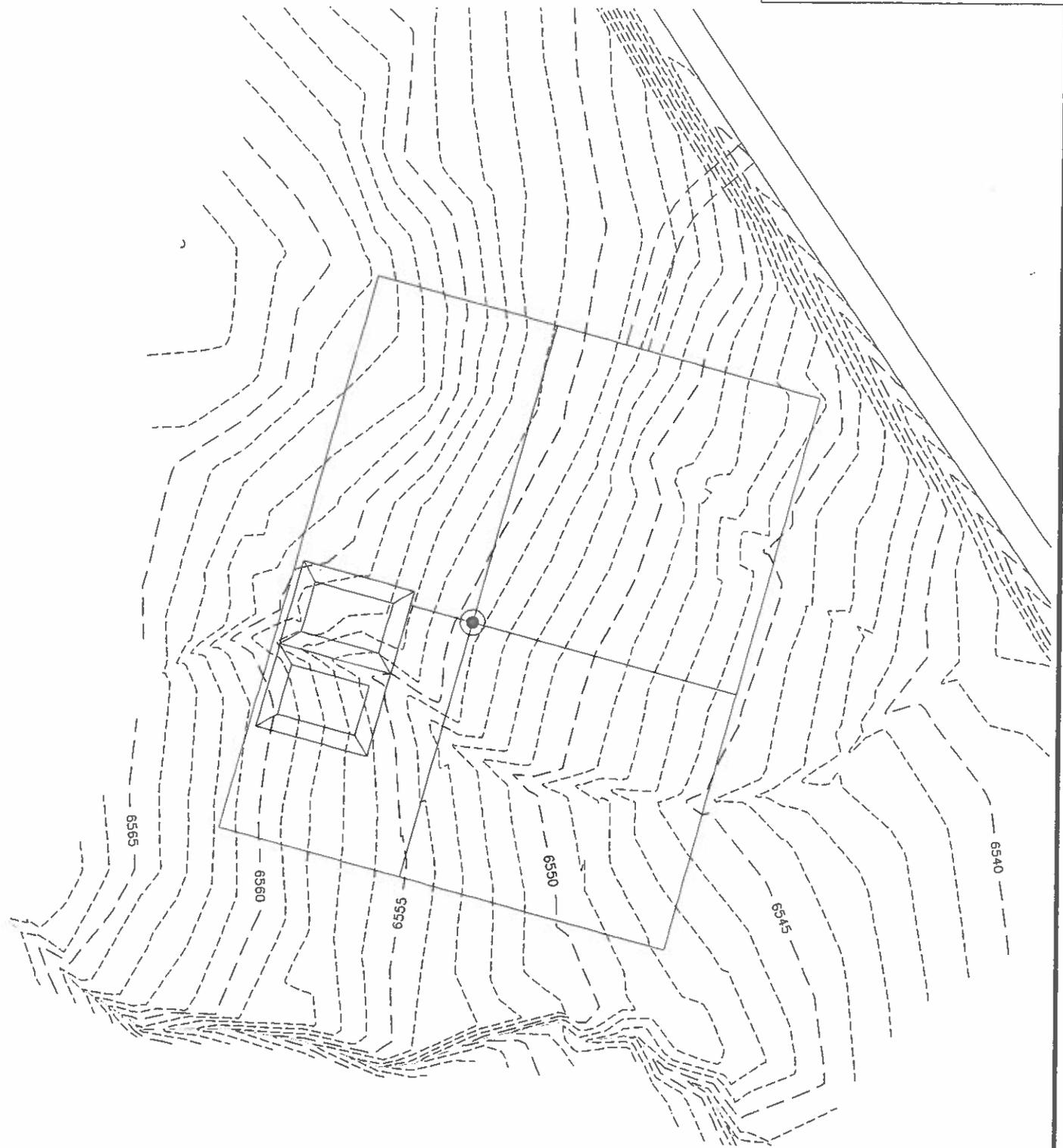
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GEO SURV
LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 666 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199
NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

EXISTING CONTOURS

BDU 25-1-199 PAD



North

0 100 200

Graphic Scale in Feet
1 inch = 100 feet

3 OF 12 6/23/10



LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 666 0379 Fx 303 665 6320

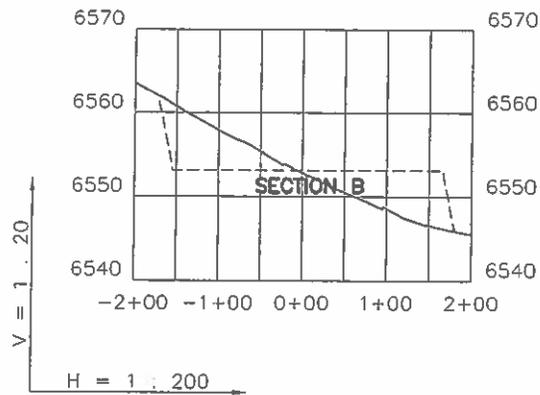
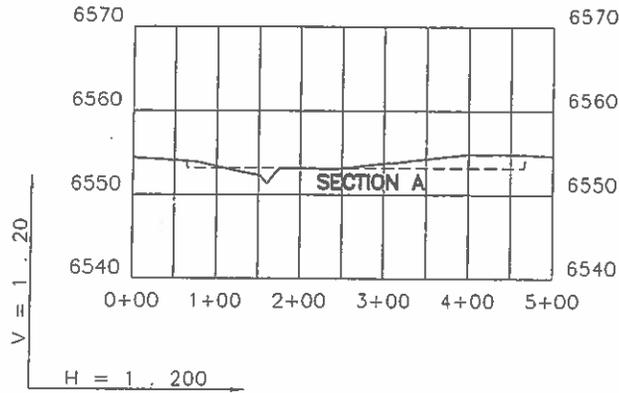
MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

DWG: c:\GEO SURV\2010\10022\Maplets\BDU 25-1-199\BDU 25-1-199 Plot R1.dwg USER: Owner DATE: Jun 23, 2010 2:21pm

CROSS SECTIONS A & B

BDU 25-1-199 PAD



4 OF 12 6/23/10

----- Existing Ground
 _____ Proposed Grade

GEO SURV
 LAND SURVEYING AND MAPPING
 LAFAYETTE - WINTER PARK
 Ph 303 666 0379 Fx 303 665 6320

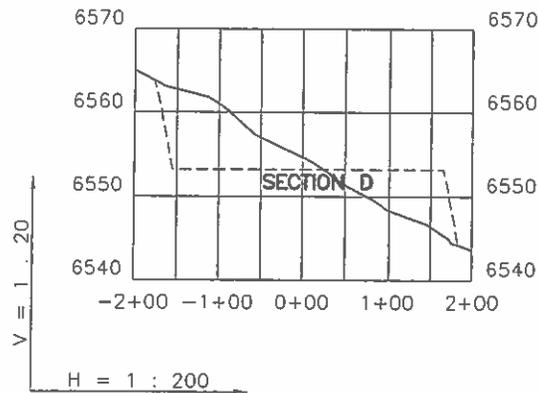
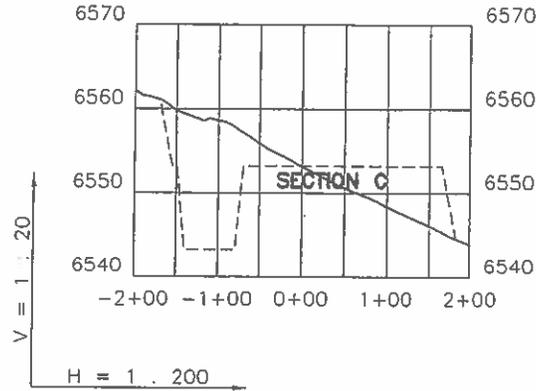
MESA ENERGY PARTNERS, LLC
 BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

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CROSS SECTIONS C & D

BDU 25-1-199 PAD



5 OF 12 6/23/10

--- Existing Ground
 — Proposed Grade



LAND SURVEYING AND MAPPING
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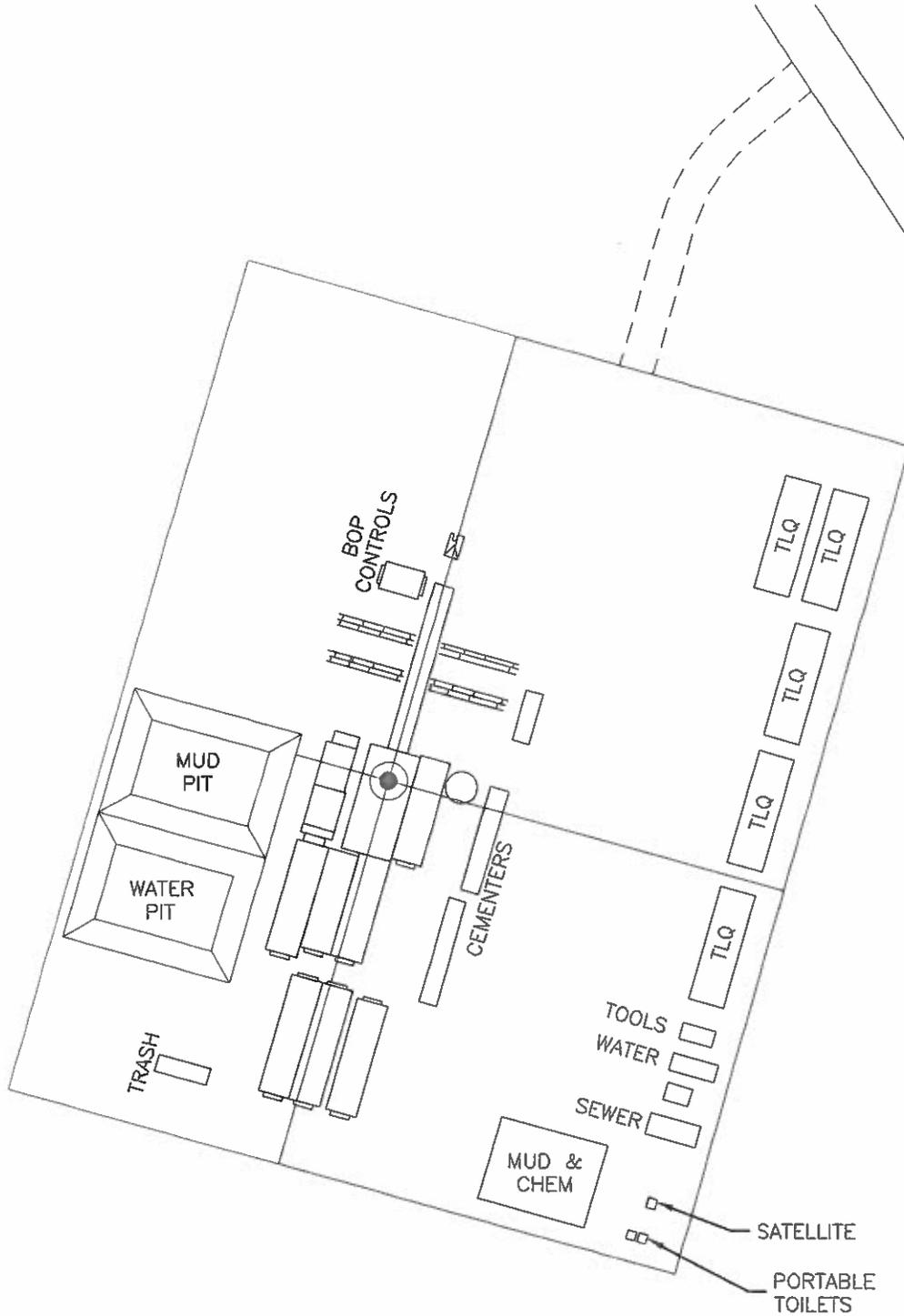
MESA ENERGY PARTNERS, LLC
 BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
 6th PM RIO BLANCO COUNTY COLORADO

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TYPICAL RIG LAYOUT

BDU 25-1-199 PAD



North

0 80 160

Graphic Scale in Feet
1 inch = 80 feet

6 OF 12 6/23/10



LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
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MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

FINAL ABANDONMENT

BDU 25-1-199 PAD

REVEGETATE
DISTURBED AREA

P&A
MONUMENT

8 OF 12 6/23/10



North



Graphic Scale in Feet
1 inch = 100 feet



LAND SURVEYING AND MAPPING
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MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

DWG: C:\GEO SURV\2010\10022\Map\pads\BDU 25-1-199\BDU 25-1-199 Pad 81.dwg USER: Owner DATE: Jun 23, 2010 2:26pm

VICINITY MAP

BDU 25-1-199 PAD

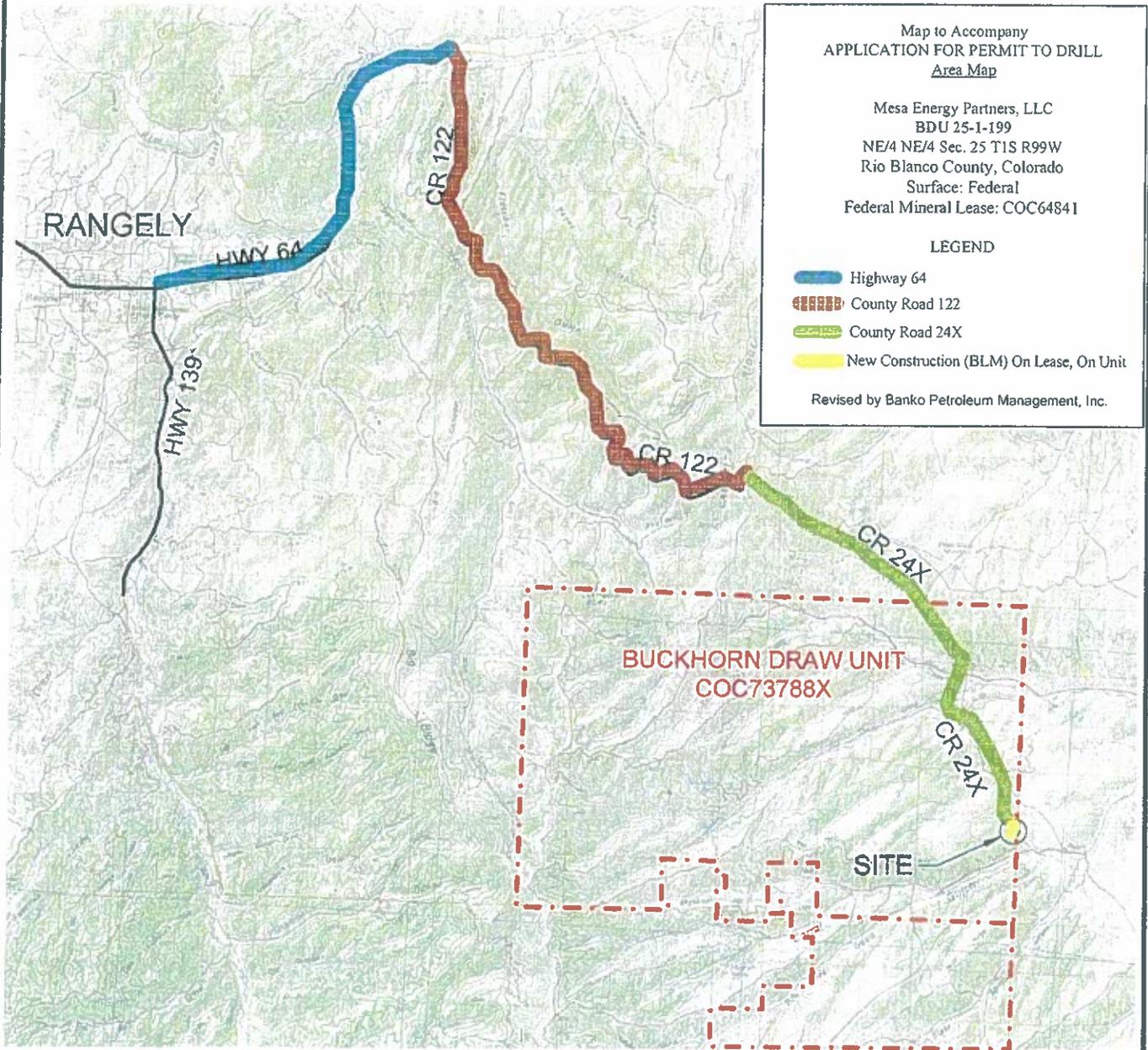
Map to Accompany
APPLICATION FOR PERMIT TO DRILL
Area Map

Mesa Energy Partners, LLC
BDU 25-1-199
NE/4 NE/4 Sec. 25 T1S R99W
Rio Blanco County, Colorado
Surface: Federal
Federal Mineral Lease: COC64841

LEGEND

-  Highway 64
-  County Road 122
-  County Road 24X
-  New Construction (BLM) On Lease, On Unit

Revised by Banko Petroleum Management, Inc.



DRIVING DIRECTIONS:

- MP 0.0 - Intersection of Highway 64 & Highway 139; East on Highway 64
- MP 9.1 - Right on CR 122; South along CR 122
- MP 25.5 - Intersection CR 122 & CR 24X; Continue straight on CR 24X
- MP 33.3 - Right on access onto BDU 25-1-199 Pad


1" = 2 MILES
GRID

10 OF 12 6/23/10



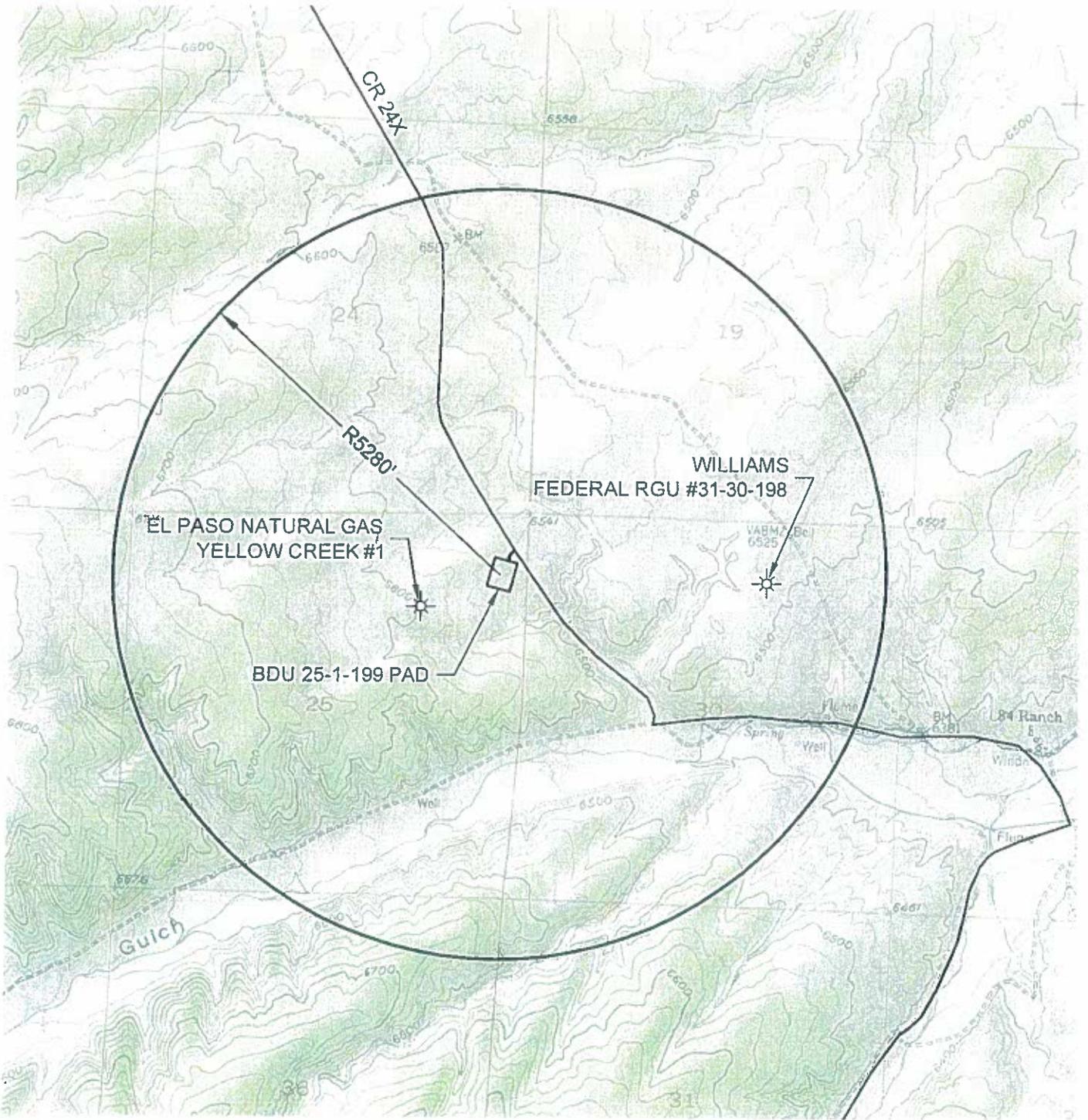
LAND SURVEYING AND MAPPING
LAFAYETTE - WINTER PARK
Ph 303 666 0379 Fx 303 665 6320

MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

WELL VICINITY MAP

BDU 25-1-199 PAD



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Ph 303 666 0379 Fx 303 665 6320

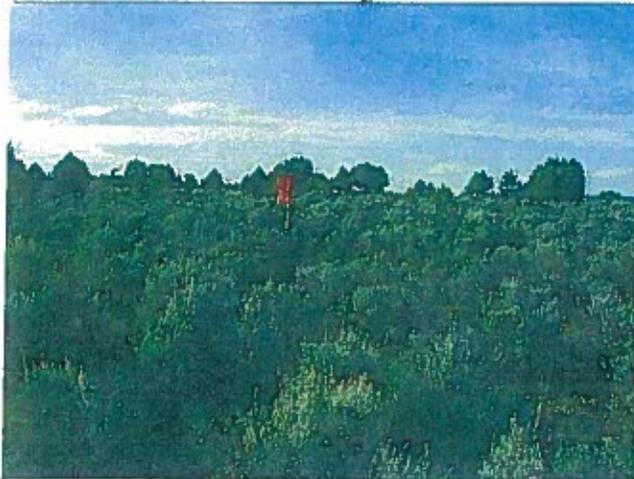
MESA ENERGY PARTNERS, LLC
BDU 25-1-199

NE1/4 NE1/4 SEC. 25 T1S R99W
6th PM RIO BLANCO COUNTY COLORADO

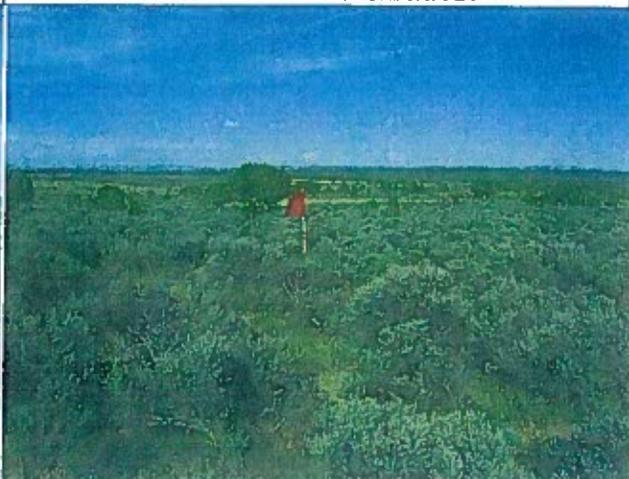
LOCATION PHOTOS

BDU 25-1-199 Pad
NNE Sec. 25 Twn. 1S Rng. 99W 6th PM
Lat: 39.939788 Long: -108.444627

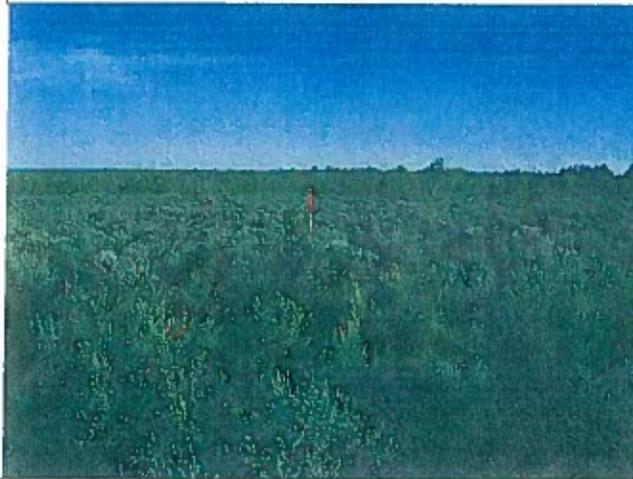
Mesa Energy Partners, LLC
Rio Blando County, CO
Date of Pictures: 5/26/2010



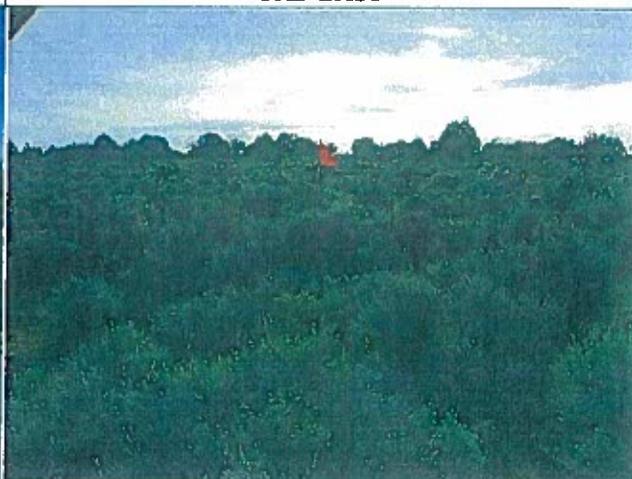
PAD NORTH



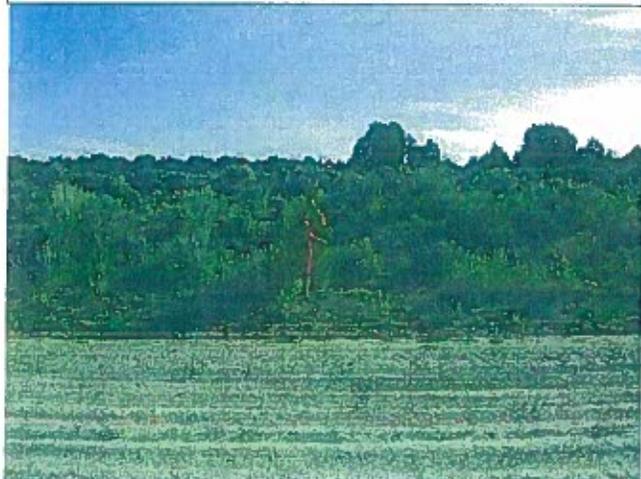
PAD EAST



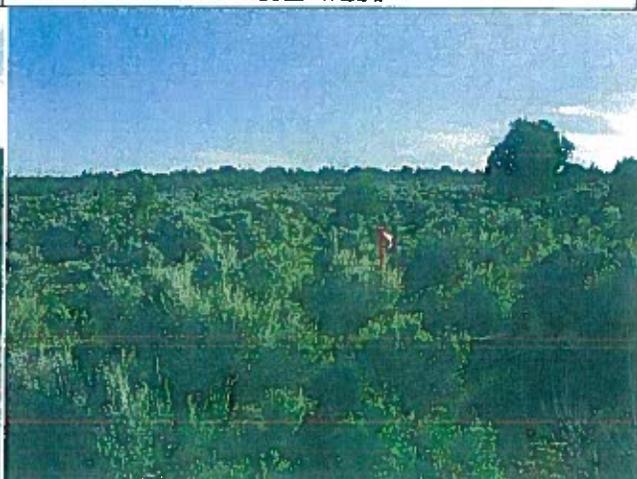
PAD SOUTH



PAD WEST



ACCESS OFF CR 24X



ACCESS TO PAD



GEOSURV Inc. 520 Stacy CT Suite B Lafayette CO 80026 ph 303 666 0379 fx 303 665 6320

G:\GEOSURV\2010\10022\Well\plots\BDU 25-1-199\Photos\BDU 25-1-199 Pad Photos.docx 6/16/2010 3:48:00 PM