



05/07/13

Ms. Bonnie Hickey
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625

RE: **EE3, LLC Form 3160-3**

Spicer #3-32H Well: (645' FSL, 747' FWL) Sec. 32 T7N R80W 6th; Jackson County, Colorado

Dear Ms. Hickey,

Please find attached herewith the Form 3160-03 and associated attachments for the above captioned well. This is a re-file of an expired permit subsequent to a change of operatorship. This permit, as submitted, is a duplicate of the permit which was submitted by EOG, the previous operator. EE3, LLC has reviewed all of the relevant data with the original permit and in the Drilling Plan, SUPO and all other relevant documents and agrees to comply with these original documents as demonstrated by the attached certification.

Should you have any questions or concerns please contact the undersigned at c: 720-560-2700, o: 303-216-0703 or cdoke@iptengineers.com.

Sincerely,


Clayton L. Doke
Senior Engineer
Peterson Energy | A Division of IPT
Consultants to EE3, LLC

Lessee or Operator's Representative and Certification:

Andy Ashby
EE3 LLC
4410 Arapahoe Ave #100
Boulder, CO 80303
(303) 444-8881
aashby@ee3llc.com

I hereby certify that I, or someone under my direct supervision, have inspected the proposed 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 to the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Executed this 7th day of May, 2013



Andy Ashby, VP of Operations

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT


APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. COC62063
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input 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
2. Name of Operator EE3 LLC		7. If Unit or CA Agreement, Name and No.
3a. Address 4410 ARAPAHOE AVENUE #100 BOULDER, CO 80303	3b. Phone No. (include area code) 303-216-0703	8. Lease Name and Well No. SPICER 3-32H
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 645' FSL, 747' FWL, Sec 32-T7N-R80W At proposed prod. zone 1100' FSL, 893' FWL, Sec 32-T7N-R80W		9. API Well No. 05-057-06469
14. Distance in miles and direction from nearest town or post office* 18.9 miles southwest of Walden, CO		10. Field and Pool, or Exploratory Unnamed
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 690'	16. No. of acres in lease 937	11. Sec., T. R. M. or Blk. and Survey or Area Sec 32, T7N, R80W, 6th PM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1911'	19. Proposed Depth 7900' TVD, 11086' TMD	12. County or Parish JACKSON
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL- 8226'	22. Approximate date work will start* 08/01/2013	13. State CO
17. Spacing Unit dedicated to this well		20. BLM/BIA Bond No. on file
23. Estimated duration 6 months		

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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature 	Name (Printed Typed) Clayton Doke	Date 05/02/2013
Title Senior Engineer		
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)

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

CONFIDENTIAL



**Spicer 3-32H
SW/SW, Section 32-T7N-R80W
Jackson County, Colorado
SURFACE USE PLAN
Revised 5-14-08**

1. EXISTING ROADS:

Refer to the attached maps for location of existing access roads. Access to the location will occur on State Highway 14 and Jackson County Road #28.

The proposed location is approximately 18.9 miles southwest of Walden, Colorado. Driving directions are attached.

The existing roads will be maintained in the same or better condition as existed prior to the commencement of operations.

2. ACCESS ROADS TO BE CONSTRUCTED:

Refer to the attached Topographic Map "B" for the location of the proposed access road. The proposed access road was centerline staked.

The new access road will be approximately 528' long and will be completed as a single lane, 16' wide, 40' sub-grade, crowned road. See attached Topographic Map "B".

Maximum grade of the new access road will be 2 percent.

There will be no turnouts and wing ditches along the proposed access route.

No Major cuts, fills, or bridges anticipated along the proposed access route.

No Gates, cattle guards, fence cuts, or modifications to existing facilities will be required on or along the proposed access route.

A minimum of six inches of topsoil will be stripped from the proposed access road prior to any further construction activity. The stripped topsoil will be stored along the sides of the new access road.

The access road will be constructed and maintained as necessary to prevent soil erosion and accommodate all-weather traffic. The road will be crowned and ditched with wing ditches installed as necessary to provide for proper drainage along the access road route.

In the event that commercial production is established from the subject well, the access road will be surfaced to an average minimum depth (after compaction) of four inches with three

inch minus pit run gravel or crushed rock, if and/or as required by the Authorized Officer. These surfacing material(s) will be purchased from a contractor having a permitted source of materials within the general area. The entire road bed, inslopes and outslopes, will be seeded with the approved seed mixture.

The access road and associated drainage structures will be constructed and maintained in accordance with roading guidelines contained in the joint BLM/USFS publication: *Surface Operating Standards for Oil and Gas Exploration and Development*, Fourth Edition, and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction. During the drilling and production phase of operations, the road surface and shoulders will be kept in a safe and useable condition and drainage ditches and culverts will be kept clear and free flowing.

3. LOCATION OF EXISTING WELLS WITHIN A ONE-MILE RADIUS:

See attached Topographic Map "C" showing all wells within a one-mile radius.

4. LOCATION OF EXISTING AND/OR PROPOSED PRODUCTION FACILITIES:

See Figure #5 *Rehab Plat* diagram for proposed production facility layout at a 1" – 50' scale and the areas of the well pad not required for production that will be reclaimed. All production facilities shall be placed so as to minimize long-term pad disturbance.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope. As agreed to at the onsite conducted 4/28/08, EOG will utilize Low Profile Tanks at this location.

All permanent (on site six months or longer) aboveground structures constructed or installed on location and not subject to safety requirements will be painted Shale Green (5Y 4/2).

Containment berms will be constructed around produced oil and water tanks. The containment berms will be constructed of compacted subsoil, be sufficiently impervious, hold 110 percent of the capacity of the largest tank, and be independent of the back cut.

A flowline will not be applied for with this permit.

5. LOCATION AND TYPE OF WATER SUPPLY:

Fresh water will be obtained from the Buffalo Creek, point of diversion, located in Section 28, T7N, R80W (NW/SW) Latitude 40 32.795' Longitude 105.32.277', via an independent water hauler. EOG estimates 10,000 bbls± of Missouri Basin water will be required for drilling operations based on comparable historic use. No water well will be drilled for this well.

If the existing access road, proposed access road, and proposed pad are dry during construction, drilling, and completion activities, water will be applied to help facilitate compaction during construction and to minimize soil loss as a result of wind erosion. Anticipated water depletion, due to dust abatement, is 374 bbls±.

6. SOURCE OF CONSTRUCTION MATERIALS:

Any construction materials that may be required for surfacing of the drill pad and access road will be obtained from a contractor having a permitted source of materials within the general area. Gravel used will be pit run gravel obtained from the John Rich's Gravel Pit located in Section 32, T7N, R80W, NW/SW.

No construction materials will be removed from Federal or Indian lands without prior approval from the appropriate surface management agency.

7. METHODS OF HANDLING WASTE DISPOSAL:

Cuttings and drilling fluids will be contained in the reserve pit.

If operationally necessary, the reserve pit will be used temporarily for storage of produced fluids during testing. Fracture stimulation fluids will be flowed back into the reserve pit for evaporation. Pit will be closed and reclaimed within six (6) months of the last date of completion (weather permitting).

Portable, self-contained chemical toilets will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to disposal of human and solid waste will be complied with.

All garbage and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage. Upon completion of operations, or as needed, the accumulated trash will be transported to a state approved waste disposal site. No trash will be placed in the reserve pit.

Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location. Any open pits will be fenced during drilling operations and said fencing will be maintained until such time as the pits have been backfilled.

EOG Resources, Inc. 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 found at the site 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 and EHS and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

8. ANCILLARY FACILITIES:

None anticipated.

9. WELL SITE LAYOUT:

A. General Information:

See the attached diagrams, Figure #1 and Figure #2, showing the proposed drill pad cross sections and cut and fills in relation to topographic features as well as access onto the pad and soil stockpiles.

All equipment and vehicles will be confined to the approved disturbed areas of this APD (i.e., access road, well pad, and spoil and topsoil storage areas).

If necessary, in order to divert surface runoff, a drainage ditch will be constructed around the upslope side of the well site.

The fill section of the pad that supports the drilling rig and any other heavy equipment will be compacted.

Production tank(s) will be 400 bbl (12' x 20') and the heater/treater will be 6' x 20' w/12' x 12' insulated building, the dehydrator/meter run will be 6' x 6' x 7', the methanol tank will be 500 gal. All equipment will be located on the reclaimed well pad.

B. Reserve Pit:

A reserve pit will be required for the referenced location. The reserve pit will be constructed in a way that minimizes the accumulation of surface precipitation runoff into the pit. This may be accomplished by appropriate placement of subsoil/topsoil storage areas and/or construction of berms or ditches.

The reserve pit will be fenced on three sides during drilling operations and the fourth side will be fenced after the drilling rig moves off the location. This fence will be either: (1) woven wire at least 28 inches high and within 4 inches of ground surface with 2 strands of barbed wire above the woven wire with 10 inch spacing, or (2) at least 4 strands of barbed wire spaced, starting from the ground, at approximately 6, 8, 10, and 12 inch intervals.

Siphons, catchments, drip pans, and absorbent pads will be installed to keep hydrocarbons produced by the drilling and/or completion rigs from entering the reserve pit. Hydrocarbons and contaminated pads will be disposed of in accordance with Colorado DEQ requirements.

The reserve pit will be backfilled as soon as dry after drilling and completion operations are finished. Pit will be closed and reclaimed no later than six (6) months following drilling and completion activities (weather permitting). If natural evaporation of the reserve pit is not feasible, alternative methods of drying, removal of fluids, or other treatment may be utilized. If fluids will be disposed of by any method other than evaporation or hauling to a DEQ approved disposal pit, prior approval from the Authorized Officer will be obtained. NOTE: If disposal involves proposed discharge or transport, Colorado DEQ approval will be obtained.

If a liner is required, then the reserve pit will be lined with a pit liner that has a permeability less than 10^{-7} cm/sec and have a burst strength equal to or exceeding 300 pounds per square inch (psi) or puncture strength of 160 psi or greater and grab tensile strength of 150 psi or greater. The liner will be resistant to deterioration by hydrocarbons. The liner will not be installed directly on rock. Where necessary, pits will first receive a layer of bedding material (e.g., sand or geotextile fiber liner) sufficient to prevent contact between the liner and any exposed rock.

10. PLANS FOR RECLAMATION OF THE SURFACE:

Interim Reclamation:

Rat and mouse holes will be filled and compacted from bottom to top immediately after release of the drilling rig from the location.

Topsoil from the berms and/or storage piles will be spread along the road's cut and fill slopes. Drainage ditches or culverts will not be blocked with topsoil and associated organic matter. The topsoil areas will be seeded as stated below. The unused area of the pad will be recontoured and topsoil spread six inches deep. The area on the contour will be ripped one foot deep using ripper teeth set on one-foot centers.

EOG will, promptly after completion of drilling operations (depending on seasonal/weather constraints), reseed the entire drill pad and access road using a drill equipped with a depth regulator, resulting in reclamation of the drillsite to approximately 0.25 acres. All seed will be drilled on the contour. The seed will be planted between one-quarter and one-half inch deep. Where drilling is not possible (i.e., too steep, rocky, etc), the seed will be broadcast and the area raked or chained to cover the seed. If the seed mixture is broadcast, the rate listed below will be doubled. Attached is the plant profile for this area. EOG will seed with certified or registered seed per BLM recommendations below:

Drill Seeding Rate

<u>SEED NAME</u>	<u>Application Rate</u> PLS/Acre	<u>Seeds/SQ. FT.</u>
<i>Grasses</i>		
Western wheatgrass Pascopyrum smithii, variety. Arriba	2.97	7.5
Thickspike Wheatgrass Elymus lanceolatus var. Critana	2.13	7.5
Bluebunch wheatgrass Pseudoroegneria spicata, var. Secar (Alternate var. Goldar)	2.51	7.5
Sheep fescue Festuca ovina, var. Covar	.62	7.5
Total	8.23	30
<i>Forbs</i>		
Alfalfa var. Ladak	.73	3.5
Big sagebrush Artemisia tridentata ssp. wyomingensis	.06	3.5
Total	.79	7

* Big sagebrush and Alfalfa may be seeded when it would be better for success

* Seed will be broadcast at twice the rate

(Seed tags will be submitted to BLM after seeding.)

*** Seeding will not occur prior to October 1, to avoid sprouting.**

*Pure live seed (PLS) formula: percent of purity of seed mixture times percent germination of seed mixture equals portion of seed mixture that is PLS.

Seeding will be done between October 1 to November 15, (before ground freeze) after completion, or as early as possible the following Spring to take advantage of available ground moisture.

Monitoring will be conducted by a qualified Operator representative (in coordination with the BLM) following initial rehabilitation work. Monitoring areas will be re-examined at the end of the first growing season. Results will be documented in a report to the BLM. Problem areas identified during monitoring will receive follow-up rehabilitation/erosion control measures. The seeding shall be repeated until a satisfactory stand, as determined by the Authorized Officer, is obtained.

CONFIDENTIAL

Final Reclamation:

Prior to final abandonment reclamation work, a Sundry Notice will be submitted to the Authorized Officer for approval.

Configuration of the re-shaped topography will be returned, as near as possible, to the original condition. Cut and fill slopes will be 3 to 1 or less. All topsoil will be re-stripped from interim reclamation and redistributed over the entire location. The entire location will be scarified 12" deep at 8" intervals. Water bars will be constructed at 8% grade. The entire location and 50' of access road will be re-seeded with the recommended seed mixture

Monitoring will be conducted by a qualified Operator representative (in coordination with the BLM) following initial rehabilitation work. Monitoring areas will be re-examined at the end of the first growing season. Results will be documented in a report to the BLM. Problem areas identified during monitoring will receive follow-up rehabilitation/erosion control measures. The seeding shall be repeated until a satisfactory stand, as determined by the Authorized Officer, is obtained.

11. SURFACE OWNERSHIP:

Surface ownership of the proposed well site, access road, and pipeline route is as follows:

Well Site: Bureau of Land Management

Roads: All roads to the location after leaving Highway 14 and County Road # 28 are on lands managed by the Bureau of Land Management or are located on private surface and are covered under existing agreements or rights of way.

12. OTHER INFORMATION:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice of Lessees. The operator is fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Construction activity will not be conducted using frozen or saturated soils material or during periods when watershed damage is likely to occur.

Weeds will be controlled on disturbed areas within the exterior limits of the access road and well pad. The control methods shall be in accordance with guidelines established by the EPA, BLM, state, and local authorities. Approval will be obtained from the Authorized Officer prior to use of pesticides.

A Class III archeological survey for the subject location has been performed and submitted by Pronghorn Archeology on December 12/11/07.

EOG Resources, Inc. completes the installation of facilities on new well locations.

Transportation Plan: Topographic Map "B" illustrates and Sections 1 and 2 of this Surface Use Plan describes EOG's planned road construction for this area.

Reclamation and Monitoring Plan: The reclamation plan is described in Section 10 above. EOG or the operator of record will monitor the success of reclamation by inspecting the site three times a year to confirm desired vegetative growth. If the inspection shows unsuccessful re-vegetation and/or invasive weeds, then appropriate remedial work will be implemented.

EOG or the operator of record, in consultation with the BLM, will monitor raptor nesting and sage grouse lek use on or near the project area and will monitor project activity in big game crucial ranges during critical periods to ensure that no unauthorized use occurs.



SPICER 3-32H

SHL: Section 32-T7N-R80W

BHL: Section 32-T7N-R80W

Jackson County, Colorado

CONFIDENTIAL

DRILLING PLAN

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS & ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

Vertical (pilot-hole)

Formation	MD/TVD (ft)	Hydrocarbon/Water Bearing Zones
Tertiary	0	
Midcoal	1189	Gas
Suddeth Coal	2184	Gas
Tertiary Base Unconformity	3524	
Sussex Marker	5007	
Sussex	5207	
Shannon	5546	
Niobrara	6750	Gas / Oil
Carlisle Shale	7162	
Frontier	7362	Gas / Oil
TD	7900	

Sidetrack & Horizontal

Formation	TVD (ft)	MD (ft)	Hydrocarbon/Water Bearing Zones
Shannon	5546	5546	
Sidetrack Point	6400	6400	
Kick-off point - build curve	6573	6573	
Niobrara	6750	6754	Gas / Oil
Landing Point (90°)	7050	7323	Gas / Oil
TD	7050	11086	Gas / Oil

NOTE: Sidetrack, Kick-off & Landing point may change based upon results of the OH logs that will be run in the pilot-hole.

All shows of fresh water and minerals will be adequately protected and reported.
Gas detection to be operational prior to drilling the Frontier.

2. PRESSURE CONTROL EQUIPMENT:

All well control equipment shall be in accordance with Onshore Order #2 for 5M systems.

The minimum specifications for pressure control equipment that will be provided are included on the attached schematic diagram showing size and pressure ratings.

CONFIDENTIAL

5000# BOP with 4" or 4-1/2" Pipe Rams
5000# BOP with Blind Rams
5000# Annular

Auxiliary equipment to be used:

- Upper kelly cock with handle available.
- Stabbing Valve

The choke manifold will include appropriate valves and adjustable chokes. The kill line will have one check valve.

Ram type preventers will be pressure tested to full working pressure (utilizing a tester and test plug) at:

- Initial installation
- Whenever any seal subject to test pressure is broken
- following related repairs
- 30 day Intervals

The annular preventer will be pressure tested to 50 percent of the rated working pressure.

All pressure tests shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip.

A BOPE pit level drill will be conducted weekly for each drilling crew.

All tests and drills will be recorded in the drilling log.

The accumulator will have sufficient capacity to open the HCR valve, close all rams plus the annular preventer, and retain 200 psi above pre-charge pressure without the use of closing unit pumps. The system will have two independent power sources to close the preventers in accordance with 5M system requirements outlined in Onshore Order #2.

Remote controls shall be readily accessible to the driller. Master controls shall be at the accumulator.

3. CASING & CEMENTING PROGRAM:

A. The proposed casing program will be as follows:

Section	Measured Depth	Hole Size	Size	Grade	Weight	Thread	Condition
Surface	0 - 800'	12 1/4"	9-5/8"	J-55	36#	STC	New
Intermediate	0 - 7323'	8 3/4"	7"	P110	23.0#	LTC	New
Production*	6373' - 11086'	6 1/4"	4-1/2"	HC-P110	11.6#	LTC	New

*4 1/2" production string will be a liner, utilizing a liner hanger with pack-off assembly.

Size	Grade	Weight	Thread	Collapse	Burst	Pressure Gradient Collapse	Pressure Gradient Burst
9 5/8	J-55	36.0	STC	2020	3520	0.43	0.50
7	P110	23.0	LTC	5650	8720	0.50	0.50
4 1/2	HC-P110	11.6	LTC	8650	10690	0.50	0.50

All casing strings below the conductor shall be pressure tested to 0.22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% minimum internal yield.

B. The proposed cementing program will be as follows:

Surface String:

Top of cement - surface
Estimated volume: gauge hole + 100% excess

430 sx Class G + additives @ 1.16 ft³/sx

Top Out (if needed)
100 sx Class G + additives @ 1.16 ft³/sx

P&A/Sidetrack:

Cement plug - 200' below the Niobrara formation to 300' above KOP. Actual depths will be discussed with BLM/COGCC before the cement plug is pumped.
Estimated volume: gauge hole + 30% excess

510 sx Class G + additives @ 1.16 ft³/sx

Intermediate String:

Top of cement - 200' above the Midcoal formation.
Estimated volume: gauge hole + 30% excess

Lead: 450 sx 35/65 Poz/G + additives @ 2.25 ft³/sx
Tail: 175 sx 50/50 Poz/G @ 1.28 ft³/sx

Production Liner: Top of cement – liner top (200' above KOP)
Estimated volume: gauge hole + 20% excess
(if open hole logs are run; caliper + 5% excess will be used)

450 sx 50/50 Poz/G + additives @ 1.29 ft³/sx

After cementing, but before commencing any test, the casing string will stand cemented until cement has reached a compressive strength of 500 psi at the shoe. WOC times will be recorded in the drillers log.

4. DRILLING FLUIDS PROGRAM:

Interval (ft)	Type	Weight (ppg)	Viscosity	Ph	Water Loss (cc)	Remarks
Surface	Spud	8.4-9.0	40-60	8-10	NC	WBM - gel & lime
Intermediate	LSND	8.8-9.8	35-45	8-10	<10	WBM - polymer system
Production	LSND	9.0-9.8	40-50	8-10	<6	WBM - polymer system

NC = no control

Sufficient quantities of mud material will be maintained on site or be readily accessible for the purpose of assuring well control. SPR will be recorded on daily drilling report after mudding up. Electronic/mechanical mud monitoring equipment will be utilized and will include a pit volume totalizer (PVT), stroke counter, and flow sensor as a minimum.

5. EVALUATION PROGRAM:

Logs MWD-GR Kick-off point to TD
(while drilling)

OH Logs: Vertical (pilot hole): AIT-PEX-ECS-CMR
Horizontal: RES-DEN-NEU-DT

Cores: None anticipated

DST's: None anticipated

6. ABNORMAL CONDITIONS:

No anticipated abnormal pressures or temperatures expected to be encountered. No hydrogen sulfide expected.

Anticipated bottom-hole pressure is approximately 3,900 psi (9.5 ppg EMW)

7. OTHER INFORMATION:

The anticipated starting date and duration of the drilling and completion operations will be as follows:

Starting Date:	Upon Approval
Duration:	60 days

The well will be drilled from surface location to bottom hole location per attached directional plan. The proposed well path should not pose any collision or interference concerns with any existing wells along its proposed path.

Footage at top of productive zone: 1100' FSL & 893' FWL, Sec 32 T7N R80W
(Intermediate casing shoe)

A completion rig will be used for completion operations. All conditions of this approved plan will be applicable during all operations conducted with the completion rig.

To ensure maximum operational flexibility, EOG Resources, Inc. respectfully requests that the Commission approve a window around the BHL with a tolerance of 200' in all directions.

Production will pass through leases COC 62063 and Fee Lease owned by North Park Registered Herefords.

EE3 LLC.
SPICER #03-32H
LOCATED IN JACKSON COUNTY, COLORADO
SECTION 32, T7N, R80W, 6th P.&M.

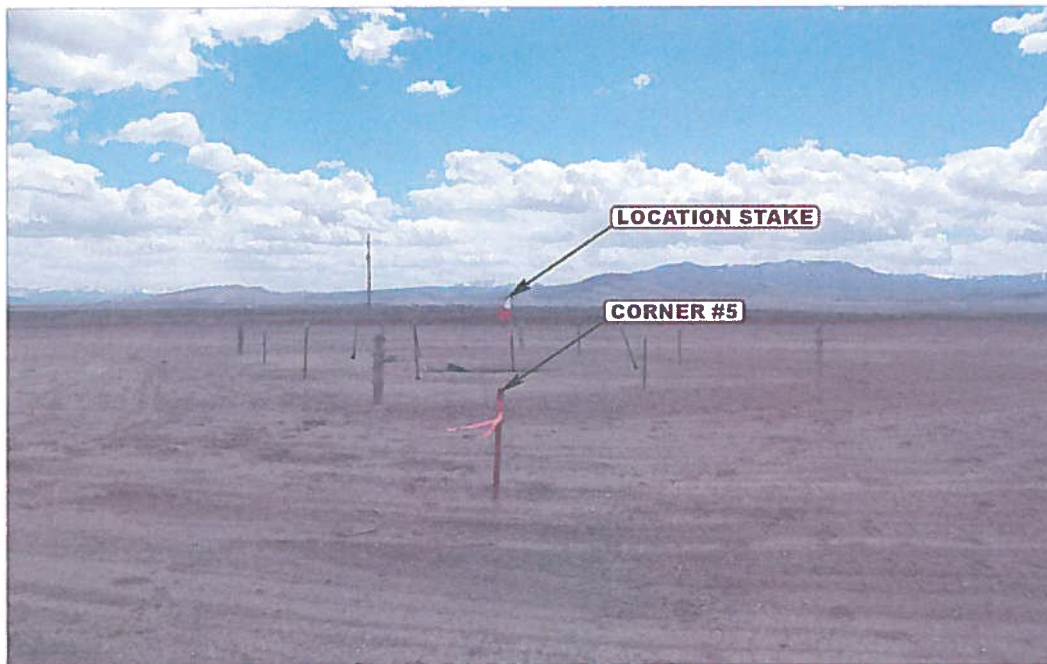


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHWESTERLY



- Since 1964 -



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS

06 **27** **11**
MONTH DAY YEAR

TAKEN BY: D.N.

DRAWN BY: C.I.

REV: 04-03-13 A.T.

PHOTO
P1

EE3 LLC.
SPICER #03-32H
LOCATED IN JACKSON COUNTY, COLORADO
SECTION 32, T7N, R80W, 6th P.&M.



PHOTO: VIEW OF LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW OF LOCATION STAKE

CAMERA ANGLE: EASTERLY



- Since 1964 -

UELS

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS

06 **27** **11**
MONTH DAY YEAR

TAKEN BY: D.N.

DRAWN BY: C.L.

REV: 04-03-13 A.T.

PHOTO
P2

EE3 LLC.
SPICER #03-32H
LOCATED IN JACKSON COUNTY, COLORADO
SECTION 32, T7N, R80W, 6th P.&M.

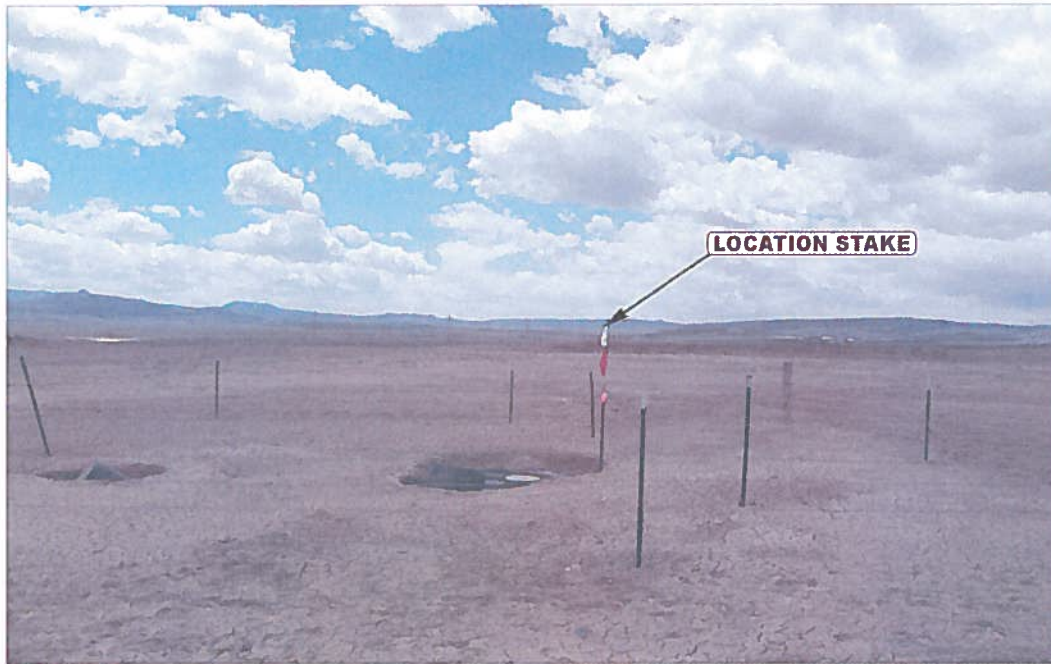


PHOTO: VIEW OF LOCATION STAKE

CAMERA ANGLE: SOUTHERLY

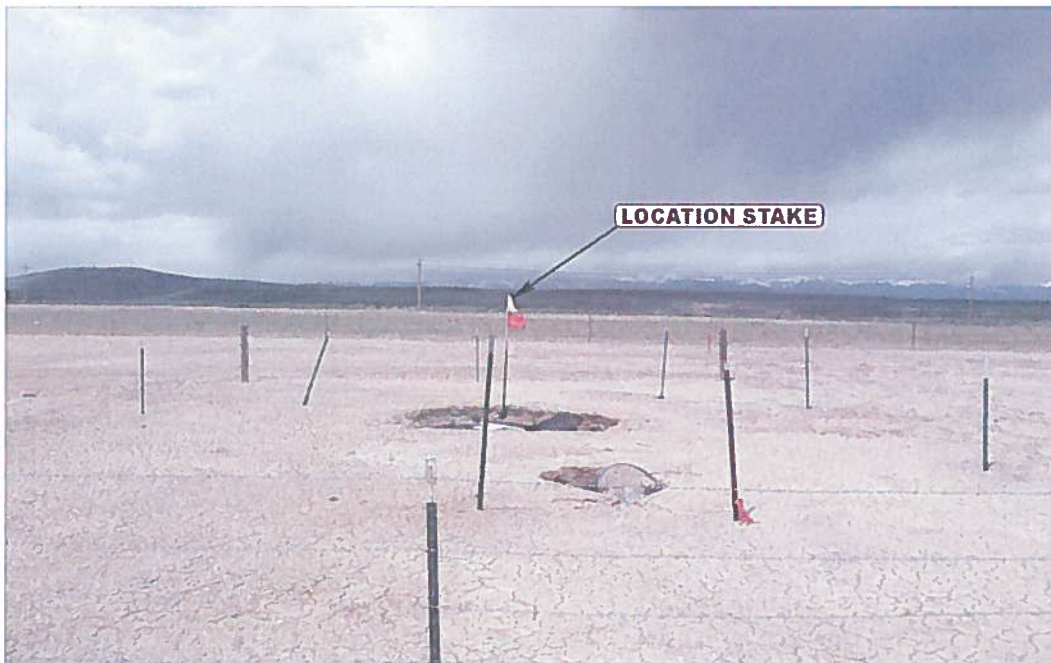


PHOTO: VIEW OF LOCATION STAKE

CAMERA ANGLE: WESTERLY



- Since 1964 -

UELS

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS

06 **27** **11**
MONTH DAY YEAR

TAKEN BY: D.N.

DRAWN BY: C.L.

REV: 04-03-13 A.T.

PHOTO
P3

T7N, R80W, 6th P.M.

EE3 LLC.

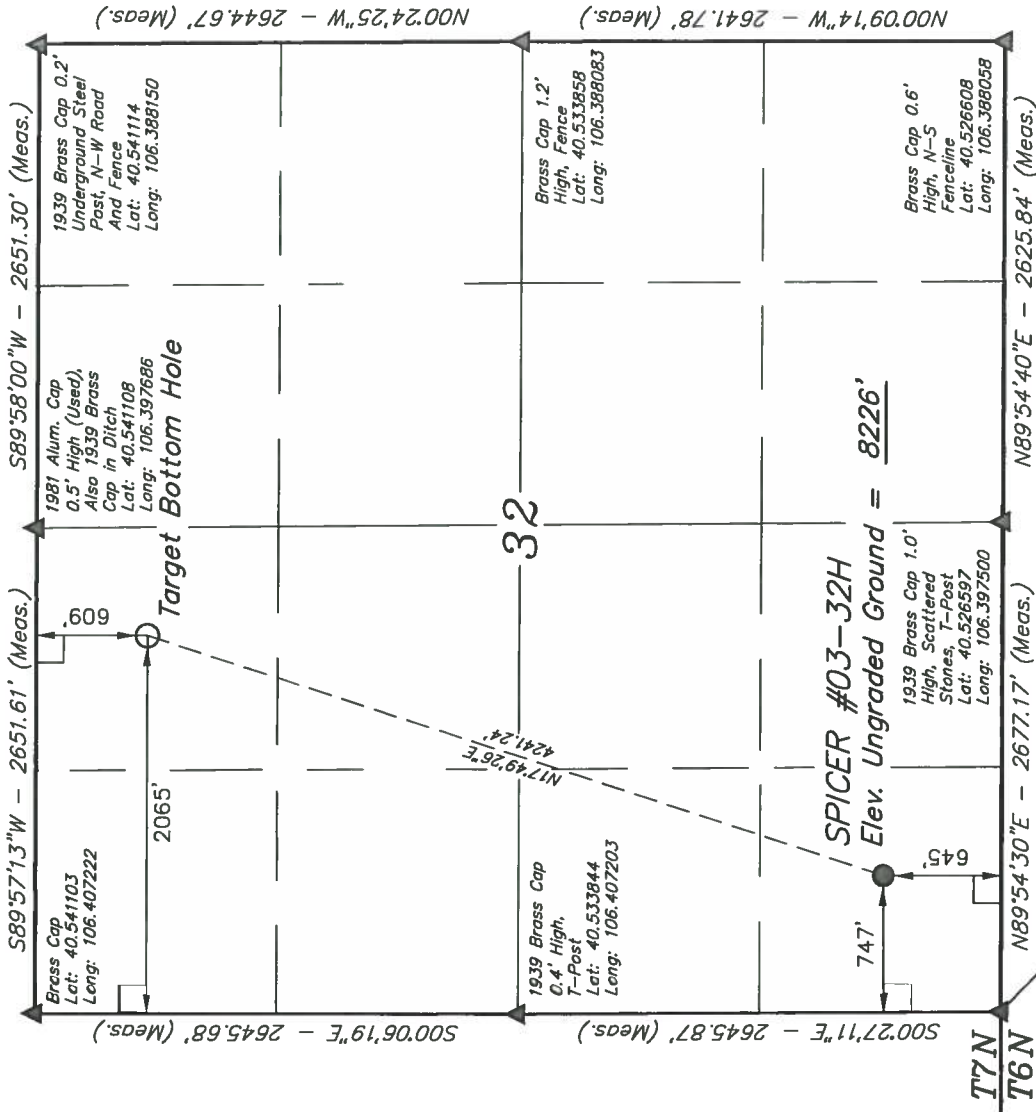
Well location, SPICER #03-32H, located as shown in the SW 1/4 SW 1/4 of Section 32, T7N, R80W, 6th P.M., Jackson County, Colorado.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION 29, T7N, R80W, 6th P.M., TAKEN FROM THE COALMONT QUADRANGLE, COLORADO, JACKSON COUNTY 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 8156 FEET

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REVISED: 04-04-13 R.L.
REVISED: 07-06-11 J.I.
REVISED: 03-12-08

REGISTERED LAND SURVEYOR
REGISTRATION NUMBER 17498
STATE OF COLORADO
04-03-13

UTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 11-04-07	DATE DRAWN: 11-16-07
PARTY J.F. D.C. L.K.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE	EE3 LLC.

PDOP = 1.9

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°32'21.98" (40.539439) LONGITUDE = 106°23'59.25" (106.399792)	LATITUDE = 40°31'42.10" (40.528361) LONGITUDE = 106°24'16.06" (106.404461)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°32'22.05" (40.539458) LONGITUDE = 106°23'57.14" (106.399206)	LATITUDE = 40°31'42.17" (40.528381) LONGITUDE = 106°24'13.95" (106.403875)
STATE PLANE NAD 83 N: 1440627.18 E: 2749918.45	STATE PLANE NAD 83 N: 1436604.86 E: 2748579.54
STATE PLANE NAD 27 N: 440625.02 E: 1750074.84	STATE PLANE NAD 27 N: 436602.88 E: 1748735.98

LEGEND:

- 90° SYMBOL
- PROPOSED WELL HEAD.
- SECTION CORNERS LOCATED.

T7N, R80W, 6th P.M.

EE3 LLC.

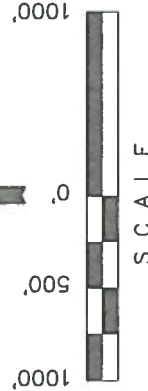
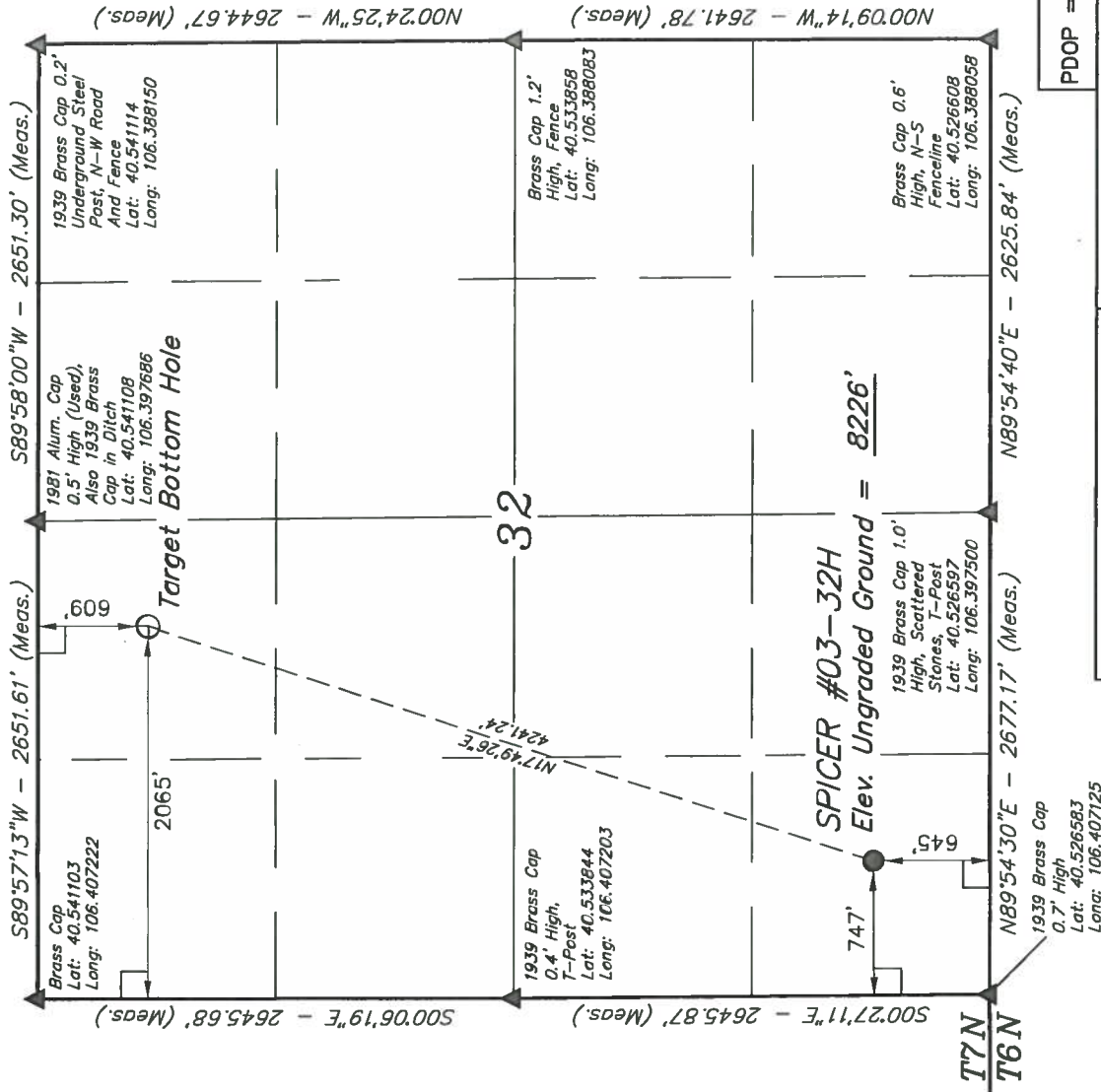
Well location, SPICER #03-32H, located as shown in the SW 1/4 SW 1/4 of Section 32, T7N, R80W, 6th P.M., Jackson County, Colorado.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION 29, T7N, R80W, 6th P.M., TAKEN FROM THE COALMONT QUADRANGLE, COLORADO, JACKSON COUNTY 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 8156 FEET

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REVISED: 04-04-13 R.L.
REVISED: 07-06-11 J.I.
REVISED: 03-12-08

REGISTERED LAND SURVEYOR
REGISTRATION NO. 17592
STATE OF COLORADO
04-09-13

UNTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)		NAD 83 (SURFACE LOCATION)	
LATITUDE = 40°32'21.98"	(40.539439)	LATITUDE = 40°31'42.10"	(40.528361)
LONGITUDE = 106°23'59.25"	(106.399792)	LONGITUDE = 106°24'16.06"	(106.404461)
NAD 27 (TARGET BOTTOM HOLE)		NAD 27 (SURFACE LOCATION)	
LATITUDE = 40°32'22.05"	(40.539456)	LATITUDE = 40°31'42.17"	(40.528381)
LONGITUDE = 106°23'57.14"	(106.399206)	LONGITUDE = 106°24'13.95"	(106.403875)
STATE PLANE NAD 83		STATE PLANE NAD 83	
N: 1440627.18 E: 2749918.45		N: 1436604.86 E: 2748579.54	
STATE PLANE NAD 27		STATE PLANE NAD 27	
N: 440625.02 E: 1750074.84		N: 436602.68 E: 1748735.98	

PDOP = 1.9

EE3 LLC.

LOCATION LAYOUT FOR

SPICER #03-32H
SECTION 32, T7N, R80W, 6th P.M.
645' FSL 747' FWL

FIGURE #1

SCALE: 1" = 60'

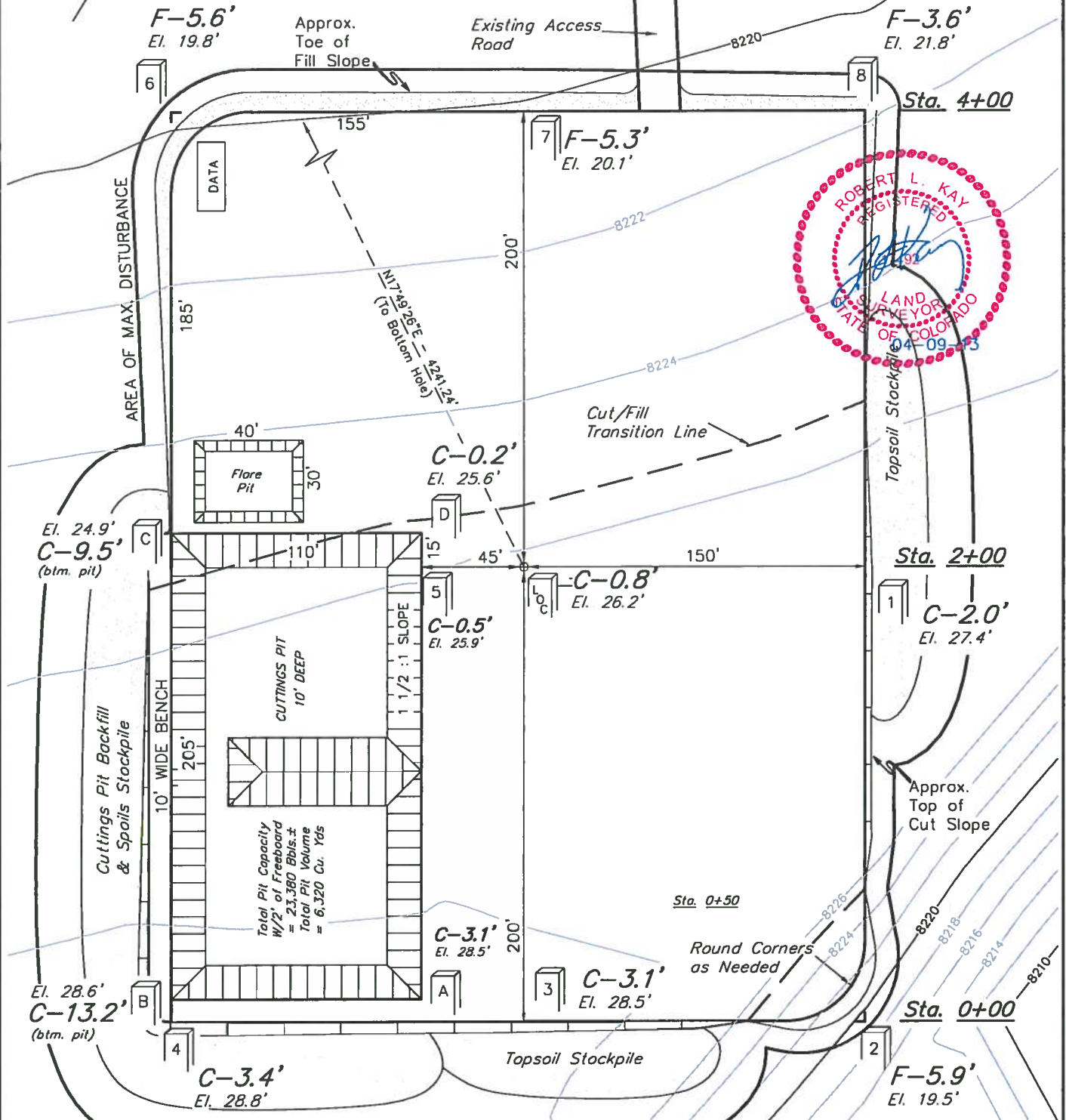
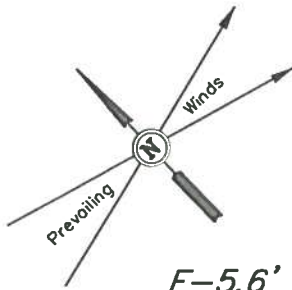
DATE: 11-16-07

Drawn By: L.K.

REVISED: 01-07-08

REVISED: 07-06-11 J.I.

REVISED: 04-04-13 R.L.



Elev. Ungraded Ground at Location Stake = 8226.2'

Elev. Graded Ground at Location Stake = 8225.4'

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

EE3 LLC.

FIGURE #2

1" = 40'
X-Section
Scale
1" = 100'

TYPICAL CROSS SECTIONS FOR

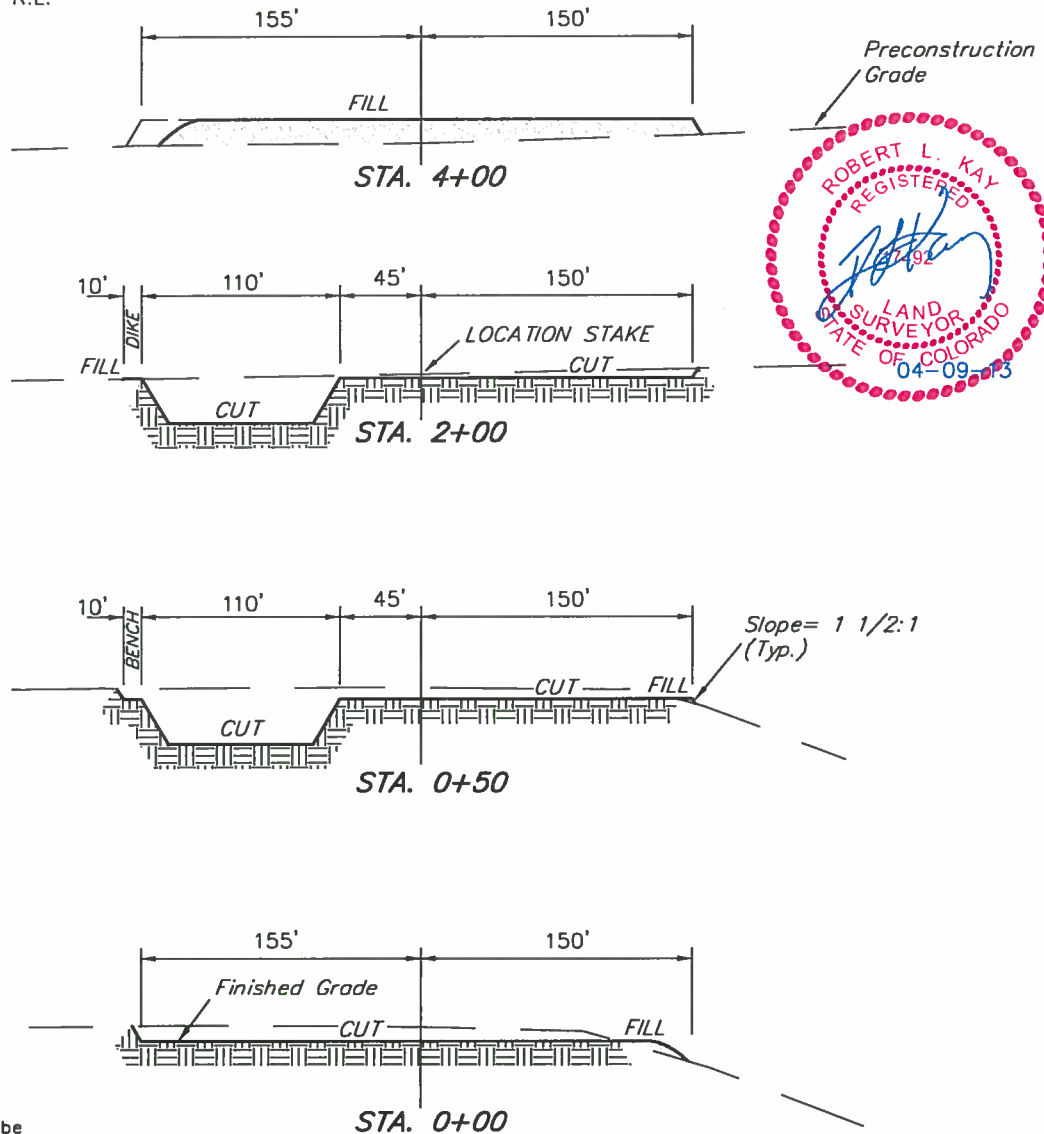
SPICER #03-32H
SECTION 32, T7N, R80W, 6th P.M.
645' FSL 747' FWL

DATE: 11-16-07

Drawn By: L.K.

REVISED: 07-06-11 J.I.

REVISED: 04-04-13 R.L.



* NOTE:
FILL QUANTITY INCLUDES
5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT

(6") Topsoil Stripping = 2,480 Cu. Yds.

Remaining Location = 9,630 Cu. Yds.

TOTAL CUT = 12,110 CU.YDS.

FILL = 6,470 CU.YDS.

EXCESS MATERIAL = 5,640 Cu. Yds.

Topsoil & Pit Backfill (1/2 Pit Vol.) = 5,640 Cu. Yds.

EXCESS UNBALANCE = 0 Cu. Yds.
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

EE3 LLC.

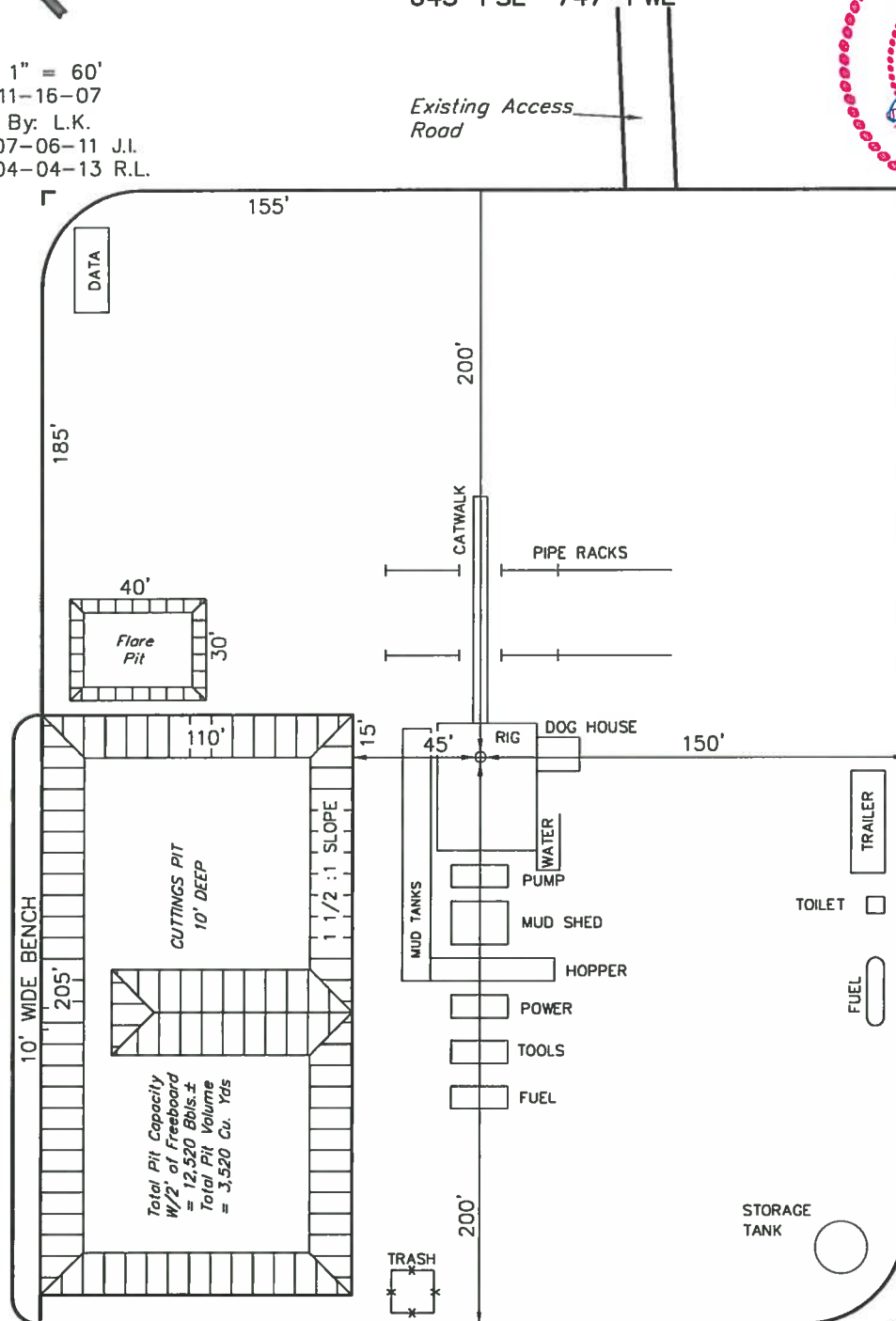
TYPICAL RIG LAYOUT FOR

SPICER #03-32H
SECTION 32, T7N, R80W, 6th P.M.
645' FSL 747' FWL

FIGURE #3



SCALE: 1" = 60'
DATE: 11-16-07
Drawn By: L.K.
REVISED: 07-06-11 J.L.
REVISED: 04-04-13 R.L.



EE3 LLC.

FIGURE #4

PRODUCTION FACILITY LAYOUT FOR

SPICER #03-32H
SECTION 32, T7N, R80W, 6th P.M.

645' FSL 747' FWL



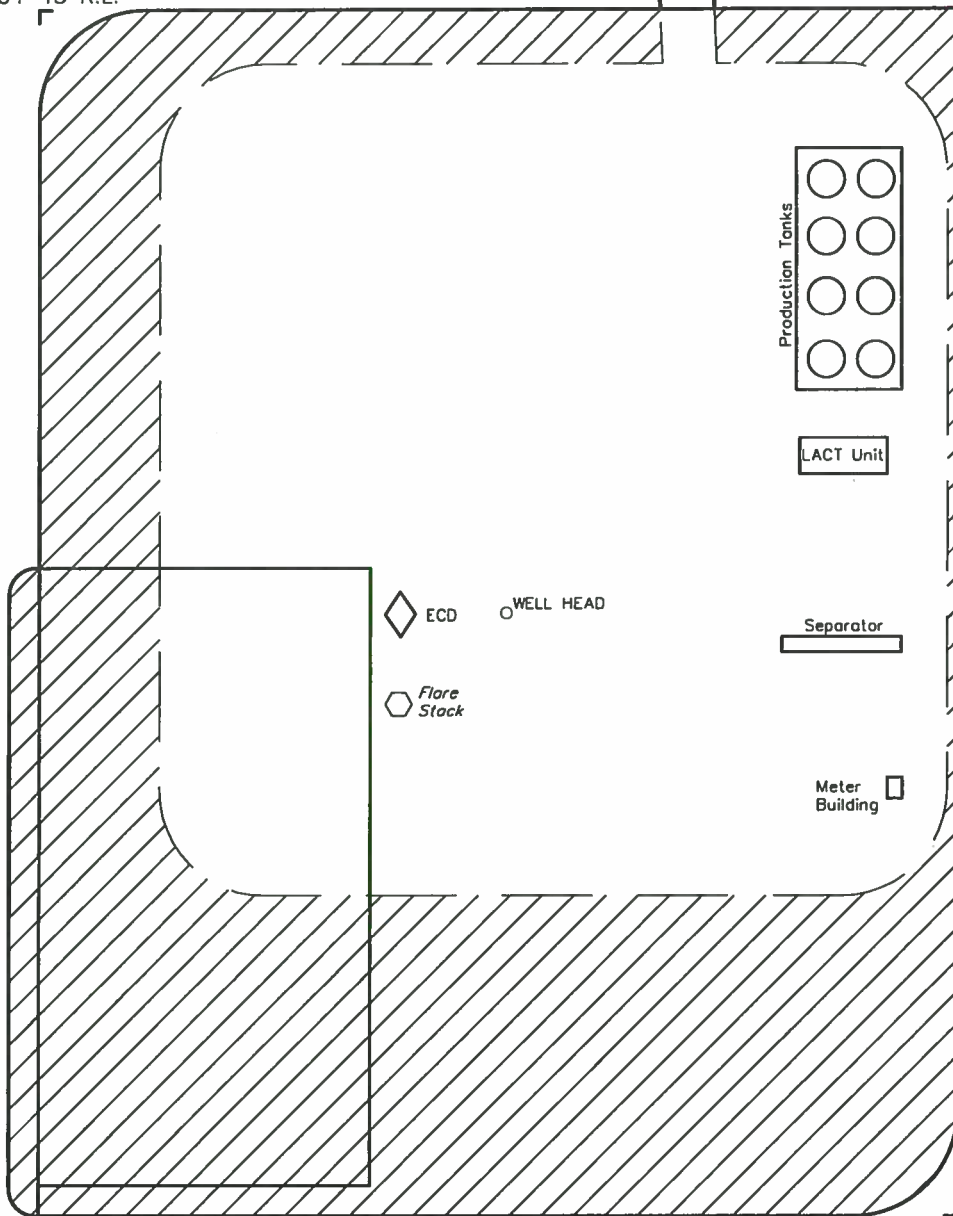
SCALE: 1" = 60'
DATE: 11-16-07

Drawn By: L.K.

REVISED: 07-06-11 J.I.

REVISED: 04-04-13 R.L.

Access
Road



APPROXIMATE ACREAGES
UN-RECLAIMED = ± 1.638 ACRES



INTERIM RECLAMATION

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

NW Cor. Sec. 32
Brass Cap

EE3 LLC.

LOCATION DRAWING FOR

SPICER #03-32H
SECTION 32, T7N, R80W, 6th. P.M.
645' FSL 747' FWL

FIGURE #5

S00°06'19"E
2645.68' (Meas.)



SCALE

DATE: 07-05-11

DRAWN BY: J.I.

REVISED: 04-04-13 R.L.

1939 Brass Cap
0.4' High, T-Post

1/4 Section Line

32

1/16 Section Line

LINE TABLE

LINE	FEATURE	DIRECTION	LENGTH
L1	POWER LINE	S53°E	353'

S00°27'11"E - 2645.87' (Meas.)
Section Line

1/16 Section Line

SW 1/4

County Road #28

North Park
Registered
Herefords

Existing
Access Road

WEST 747'
(To Property Line)

S81°W 22.5 Miles
(To Railroad)

S58°W 2990'
(To Water Well
& Building)

SOUTH 341'
(To Surface
Water)

OKP

OKP

Powerline

1939 Brass Cap
1.0' High, Scattered
Stones, T-Post

SE Cor. Sec. 32
Brass Cap 0.6'
High, N-S Fenceline

T7N

T6N

1939 Brass Cap
0.7' High

N89°54'30"E - 2677.17' (Meas.)

Section Line

N89°54'40"E
2625.84' (Meas.)

PLANT COMMUNITY

- ☐ DISTURBED GRASSLAND
- ☐ NATIVE GRASSLAND
- ☐ SHRUB LAND
- ☐ PLAINS RIPARIAN
- ☐ MOUNTAIN RIPARIAN
- ☐ FOREST LAND
- ☐ WETLANDS AQUATIC
- ☐ ALPINE
- ☐ OTHER (Describe):

CURRENT LAND USE

- CROP LAND: ☐ IRRIGATED ☐ DRY LAND ☐ IMPROVED PASTURE ☐ HAY MEADOW ☐ CRP
- NON-CROP LAND: ☐ RANGELAND ☐ TIMBER ☐ RECREATIONAL ☐ OTHER (Describe)
- SUBDIVIDED: ☐ INDUSTRIAL ☐ COMMERCIAL ☐ RESIDENTIAL

FUTURE LAND USE

- CROP LAND: ☐ IRRIGATED ☐ DRY LAND ☐ IMPROVED PASTURE ☐ HAY MEADOW ☐ CRP
- NON-CROP LAND: ☐ RANGELAND ☐ TIMBER ☐ RECREATIONAL ☐ OTHER (Describe)
- SUBDIVIDED: ☐ INDUSTRIAL ☐ COMMERCIAL ☐ RESIDENTIAL

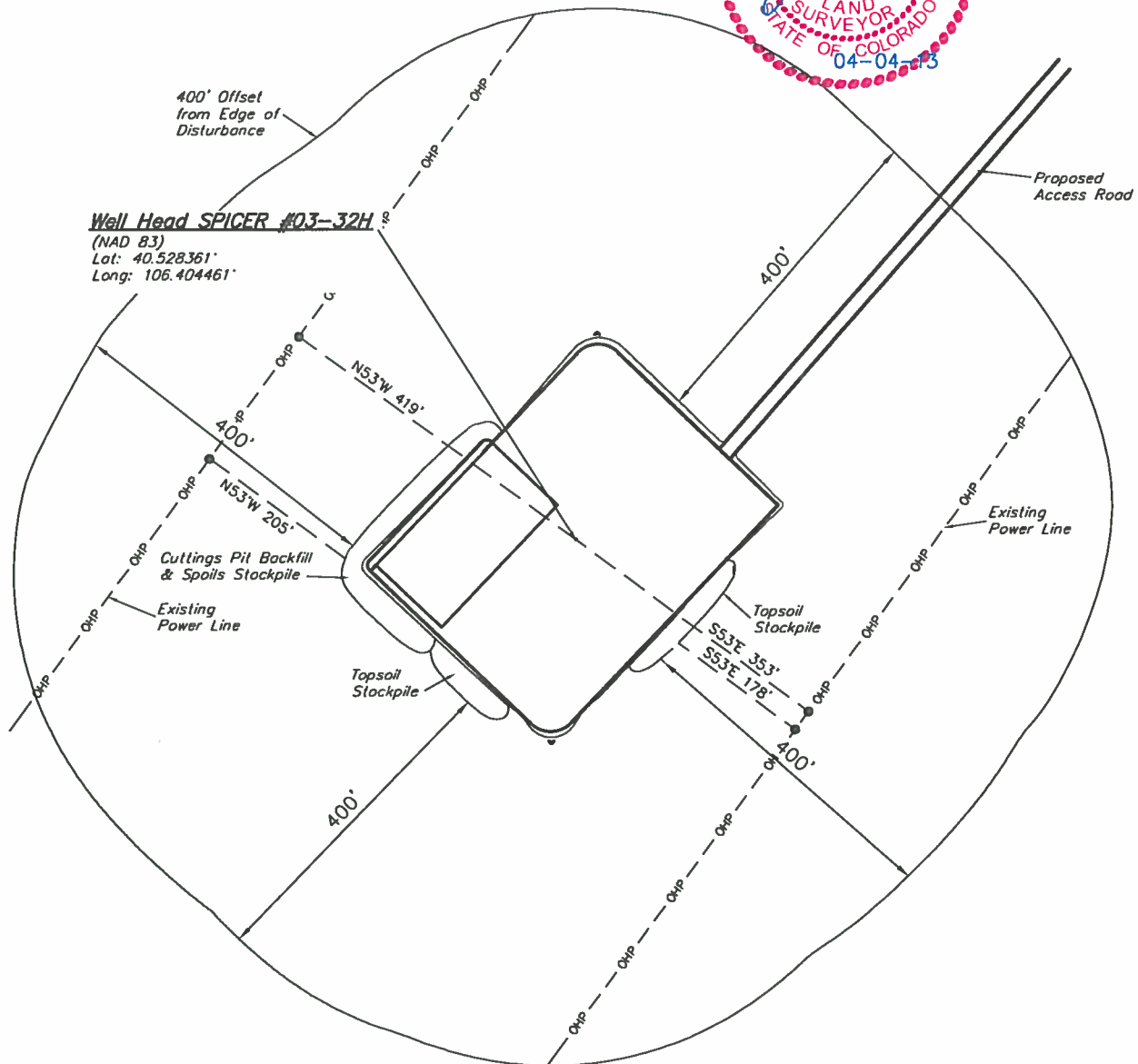
UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

FIGURE #5A

SPICER #03-32H
SECTION 32, T7N, R80W, 6th P.M.
645' FSL 747' FWL



SCALE: 1" = 200'
DATE: 07-05-11
Drawn By: J.I.
REVISED: 04-04-13 R.L.



UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

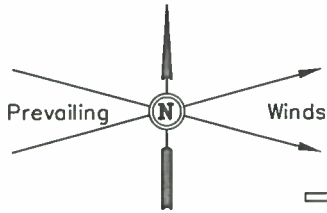
EE3 LLC.

PLOT PLAN TANK BATTERY FOR

SPICER #03-32H

SECTION 32, T7N, R80W, 6th P.M.

645' FSL 747' FWL



— Separator

● Well Head

□ Meter Building

— Access

◇ ECD

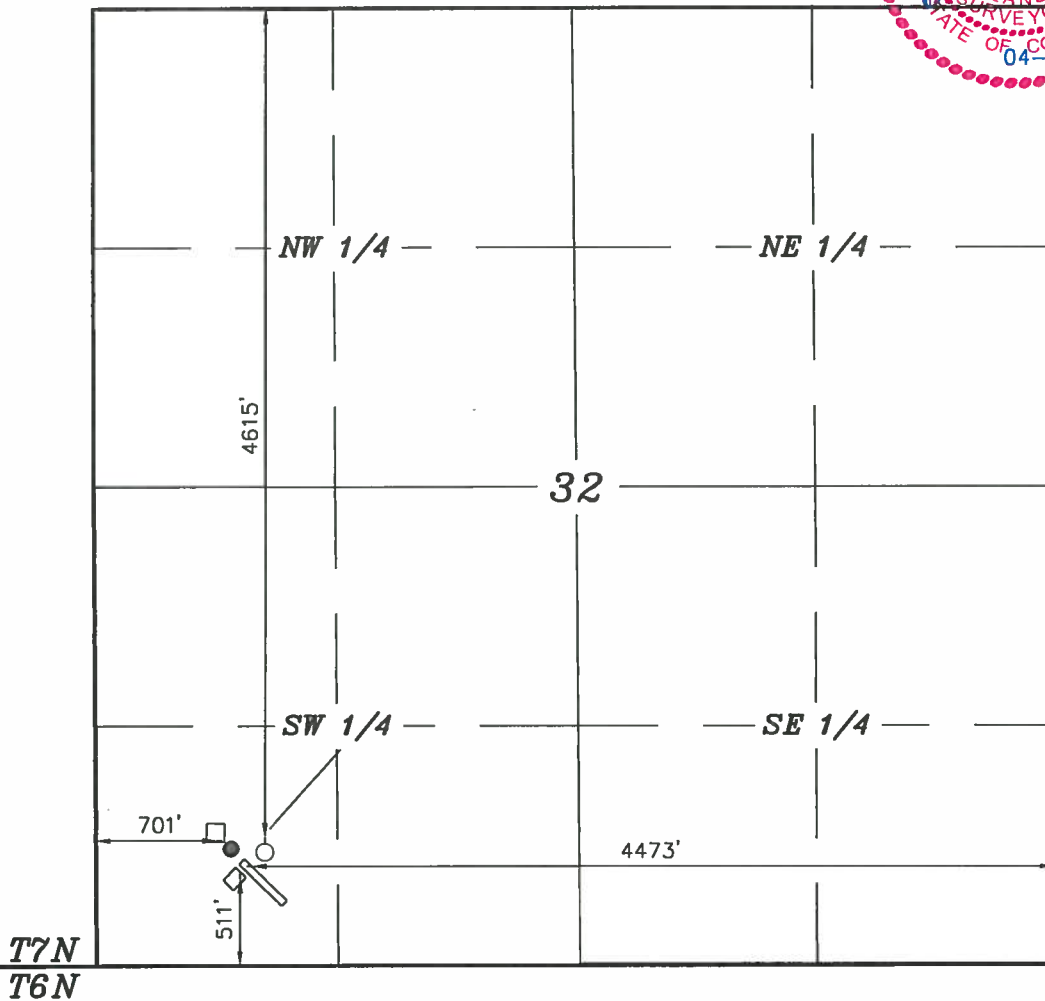
○ Production Tanks

SCALE: 1" = 1000'

DATE: 07-05-11

DRAWN BY: J.I.

REVISED: 04-04-13 R.L.



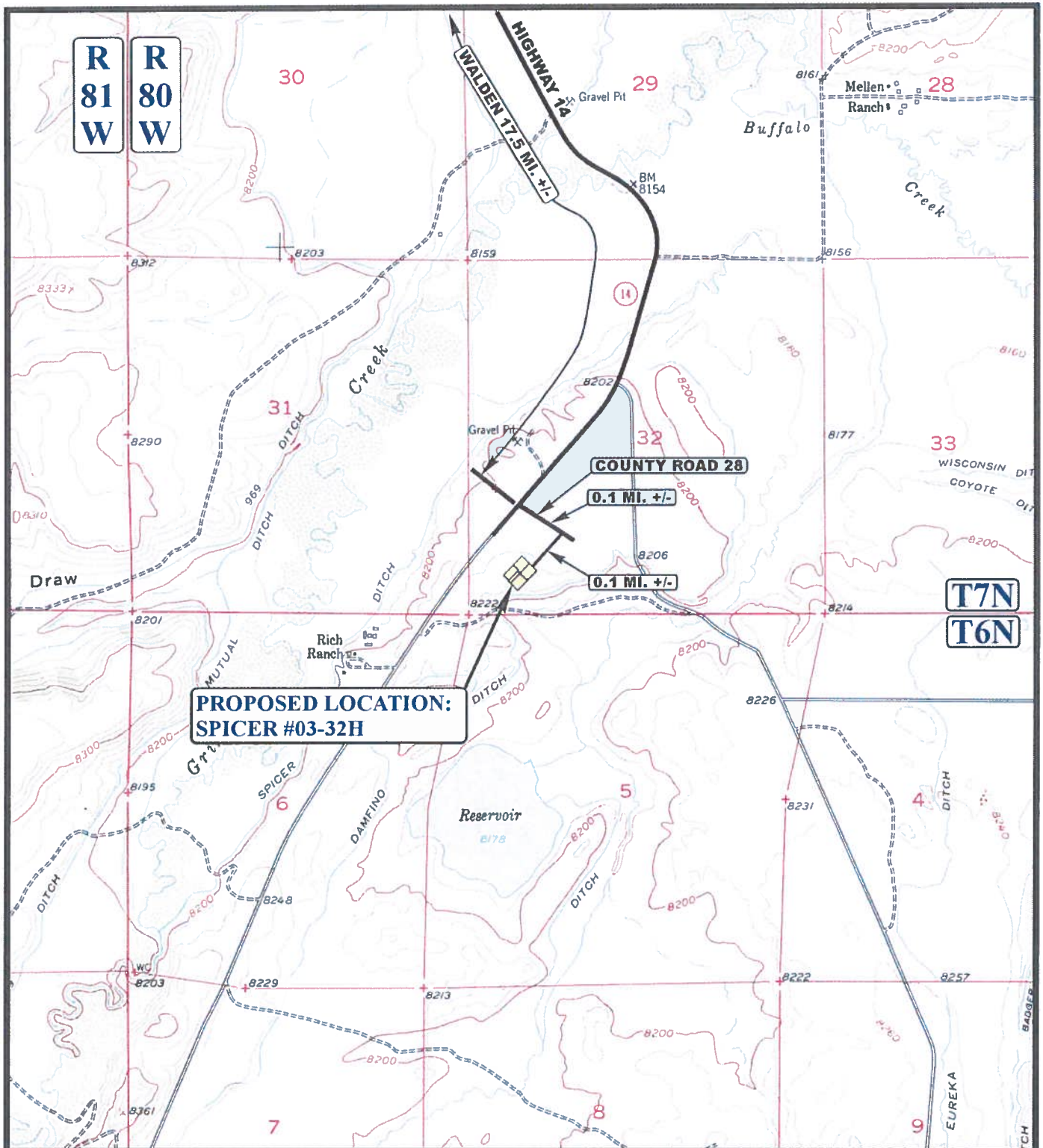
ACCESS: BEGINNING AT THE JUNCTION OF HIGHWAY #14 AND COUNTY ROAD #28 PROCEED IN A SOUTHEASTERLY DIRECTION ALONG COUNTY ROAD #28 APPROXIMATELY 0.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE SPICER #03-32H PAD.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

EE3 LLC.
SPICER #03-32H
SECTION 32, T7N, R80W, 6th P.M.

PROCEED IN A WESTERLY, THEN SOUTHERLY DIRECTION FROM WALDEN, COLORADO ON STATE HIGHWAY 125 APPROXIMATELY 1.2 MILES TO THE JUNCTION OF THIS ROAD AND HIGHWAY 14 TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY, THEN SOUTHWESTERLY, THEN SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 16.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM WALDEN, COLORADO TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 17.7 MILES.



LEGEND:

EXISTING ROAD
 PROPOSED ACCESS ROAD



EE3 LLC.

SPICER #03-32H
SECTION 32, T7N, R80W, 6th P.M.
645' FSL 747' FWL



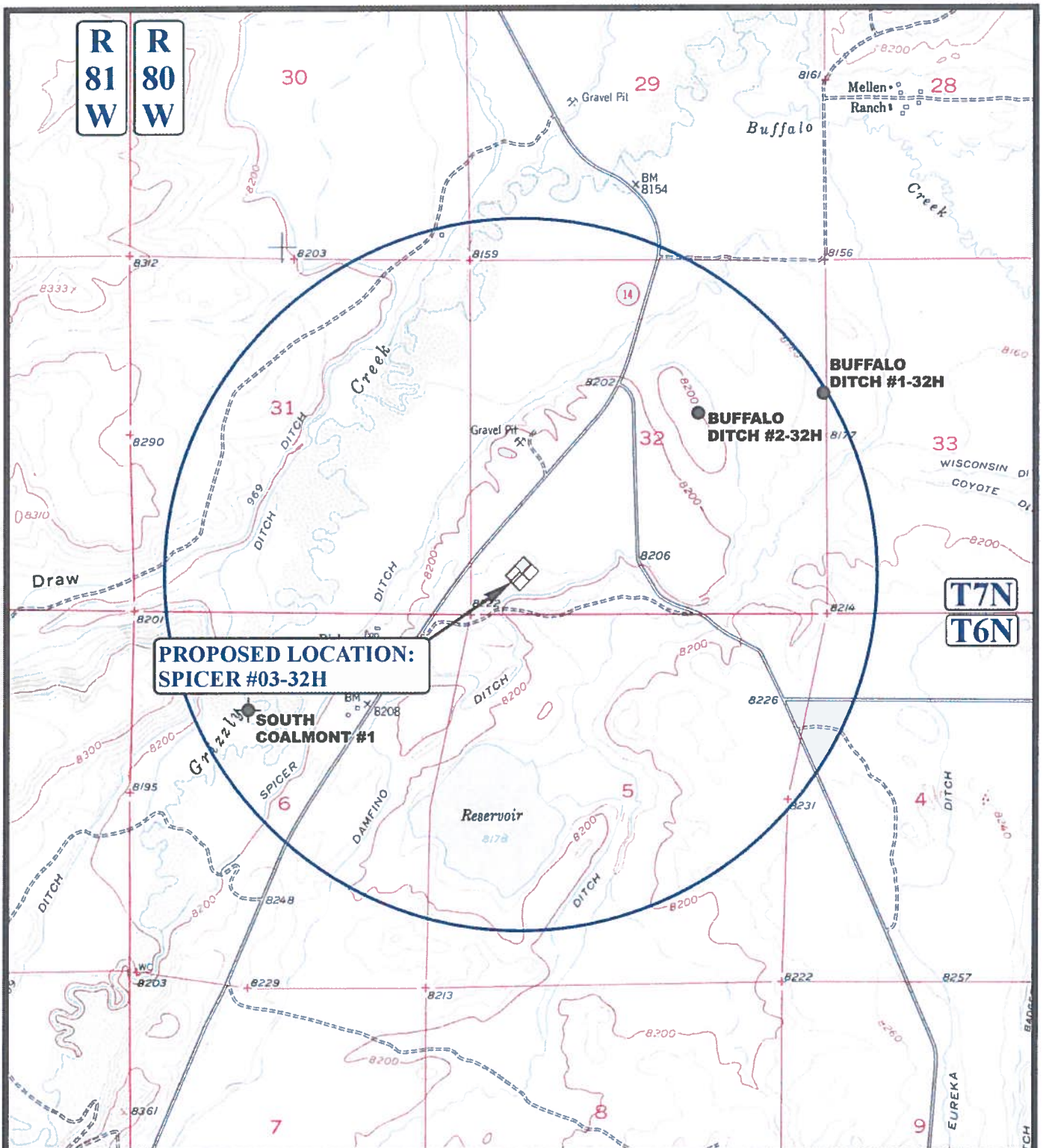
Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

ACCESS ROAD
MAP

11 **16** **07**
 MONTH DAY YEAR



SCALE: 1" = 2000' DRAWN BY: Z.L. REV: 04-03-13 A.T.



LEGEND:

- ⊗ DISPOSAL WELLS
- PRODUCING WELLS
- ⊙ SHUT IN WELLS
- ⊙ ABANDONED WELLS
- ⊙ TEMPORARILY ABANDONED



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



EE3 LLC.

SPICER #03-32H
SECTION 32, T7N, R80W, 6th P.M.
645' FSL 747' FWL

TOPOGRAPHIC
MAP

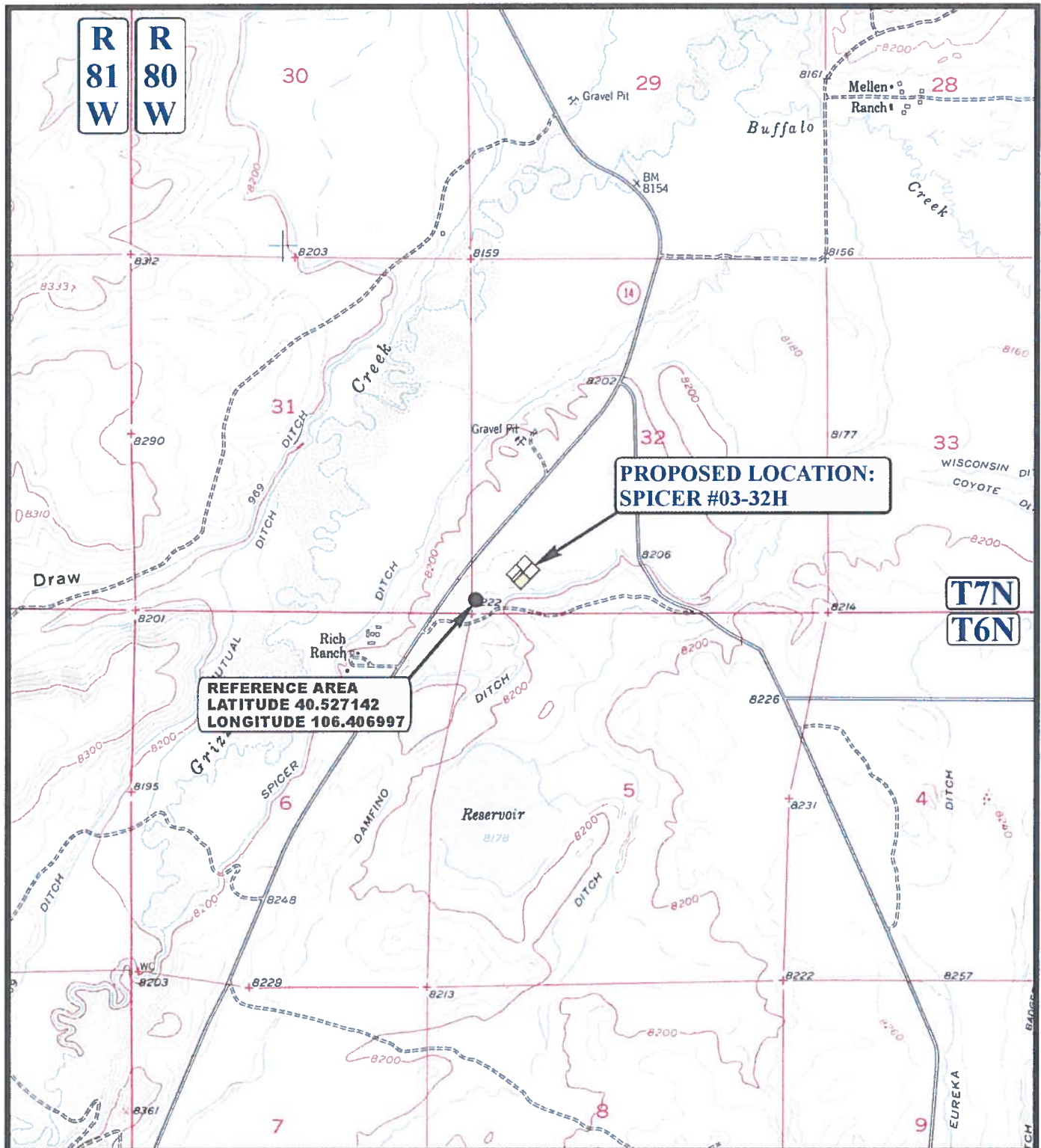
11 16 07
 MONTH DAY YEAR

SCALE: 1" = 2000'

DRAWN BY: Z.L.

REV: 04-03-13 A.T.





LEGEND:



EE3 LLC.

**SPICER #03-32H
SECTION 32, T7N, R80W, 6th P.M.
645' FSL 747' FWL**



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

**REFERENCE AREA
MAP**

06 27 11
MONTH DAY YEAR

**REF
TOPO**

SCALE: 1" = 2000' DRAWN BY: C.L. REV: 04-03-13 A.T.

EE3 LLC.
SPICER #03-32H
LOCATED IN JACKSON COUNTY, COLORADO
SECTION 32, T7N, R80W, 6th P.&M.



PHOTO: VIEW OF REFERENCE AREA

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW OF REFERENCE AREA

CAMERA ANGLE: EASTERLY



- Since 1964 -

UELS

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

**REFERENCE AREA
PHOTOS**

TAKEN BY: D.N.

DRAWN BY: C.I.

06 **27** **11**
MONTH DAY YEAR

REV: 04-03-13 A.T.

**PHOTO
REF 1**

EE3 LLC.
SPICER #03-32H
LOCATED IN JACKSON COUNTY, COLORADO
SECTION 32, T7N, R80W, 6th P.&M.



PHOTO: VIEW OF REFERENCE AREA

CAMERA ANGLE: SOUTHERLY



PHOTO: VIEW OF REFERENCE AREA

CAMERA ANGLE: WESTERLY



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

**REFERENCE AREA
PHOTOS**

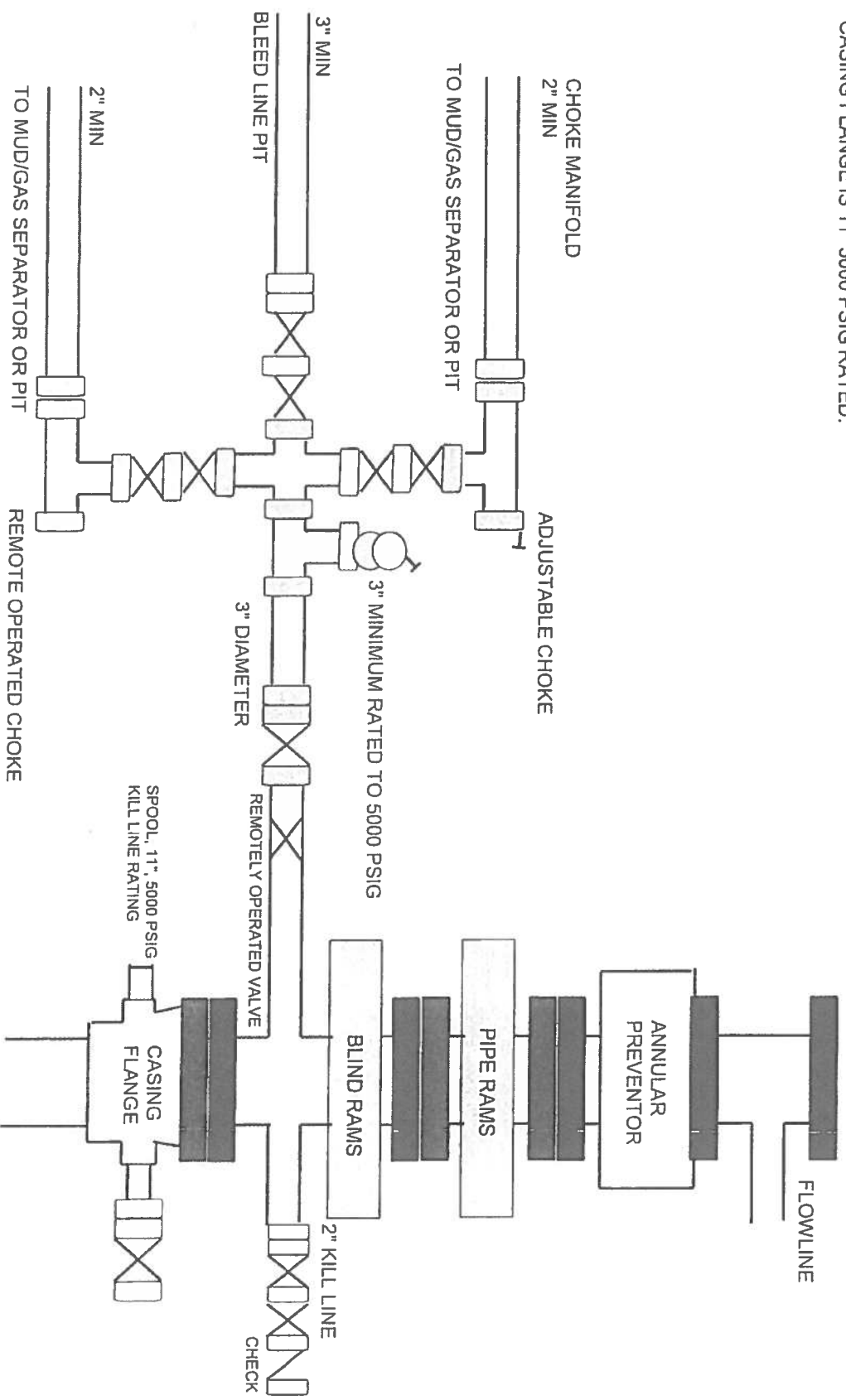
06 27 11
MONTH DAY YEAR

TAKEN BY: D.N. DRAWN BY: C.I. REV: 04-03-13 A.T.

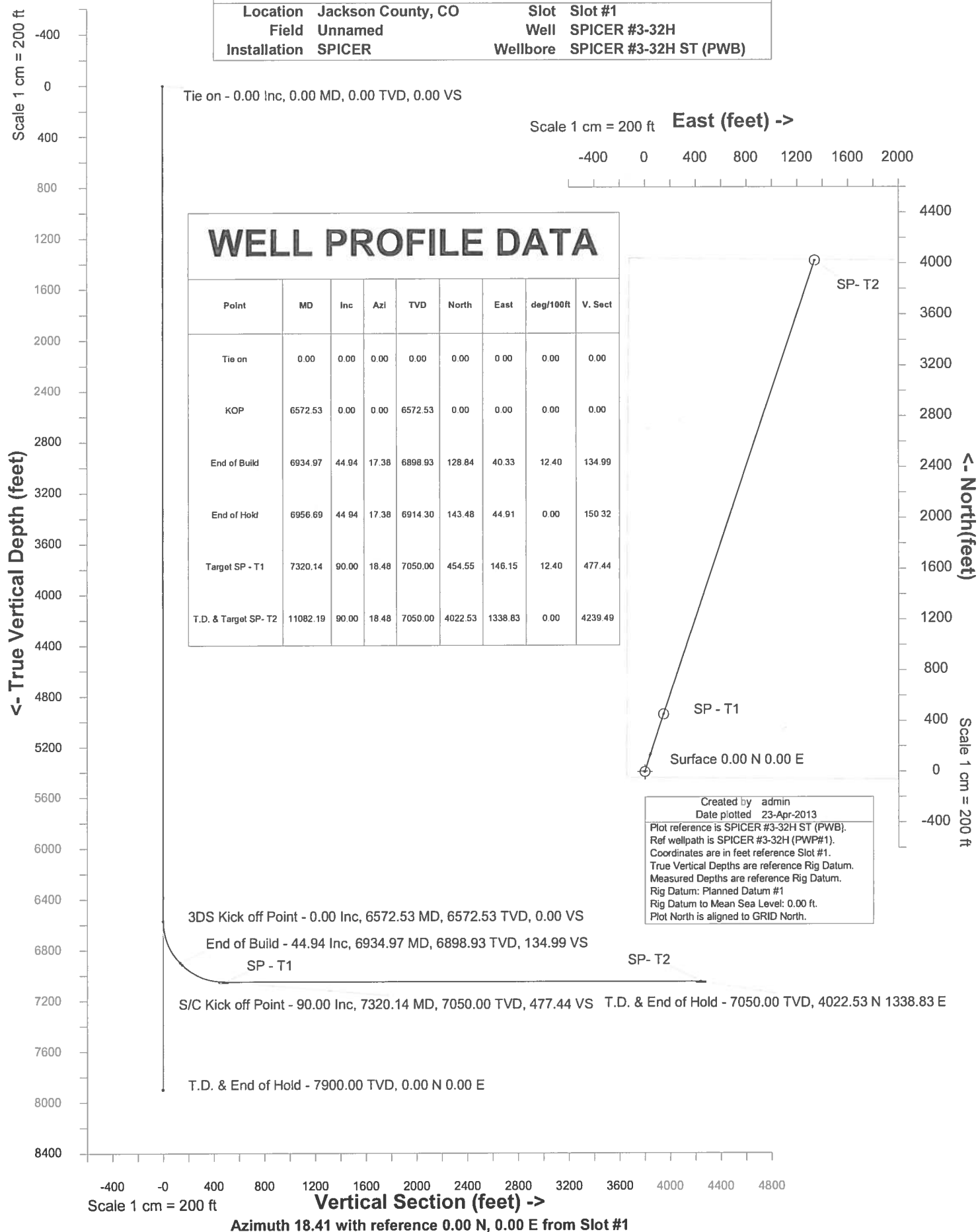
**PHOTO
REF2**

5000 PSIG BOPE DIAGRAM

ANNULAR PREVENTOR AND BOTH RAMS ARE 5000 PSIG RATED.
CASING FLANGE IS 11" 5000 PSIG RATED.



Location	Jackson County, CO	Slot	Slot #1
Field	Unnamed	Well	SPICER #3-32H
Installation	SPICER	Wellbore	SPICER #3-32H ST (PWB)





INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: SPICER #3-32H ST (PWB)
Wellpath: SPICER #3-32H (PWP#1)

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Slot Elevation Above Installation
Slot #1	1436604.8224	2748579.5675	N40 31 42.0996	W106 24 16.0596	0.00N	0.00E	-0.00

Declination			
Date	Source	Time	
12-Apr-2013	IGRF Model [1900.0-2015.0]	11:29	

Site Details				
Name	Northing	Easting	Coord System Name	North Alignment
SPICER	1436604.8224	2748579.5675	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Summary Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	1436604.82	2748579.57
6572.53	0.00	0.000	6572.53	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
6934.97	44.94	17.380	6898.93	128.84N	40.33E	12.40	134.99	1436733.66	2748619.90
6956.69	44.94	17.380	6914.30	143.48N	44.91E		150.32	1436748.30	2748624.48
7320.14	90.00	18.480	7050.00	454.55N	146.15E	12.40	477.44	1437059.36	2748725.71
11082.19	90.00	18.480	7050.00	4022.53N	1338.83E	==>	4239.49	1440627.22	2749918.35

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	1436604.82	2748579.57
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1100.00	0.00	0.000	1100.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1300.00	0.00	0.000	1300.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1400.00	0.00	0.000	1400.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1500.00	0.00	0.000	1500.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1600.00	0.00	0.000	1600.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1700.00	0.00	0.000	1700.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1800.00	0.00	0.000	1800.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
1900.00	0.00	0.000	1900.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2000.00	0.00	0.000	2000.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2100.00	0.00	0.000	2100.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2200.00	0.00	0.000	2200.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2300.00	0.00	0.000	2300.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2400.00	0.00	0.000	2400.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2500.00	0.00	0.000	2500.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2600.00	0.00	0.000	2600.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2700.00	0.00	0.000	2700.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2800.00	0.00	0.000	2800.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
2900.00	0.00	0.000	2900.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
3000.00	0.00	0.000	3000.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
3100.00	0.00	0.000	3100.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
3200.00	0.00	0.000	3200.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
3300.00	0.00	0.000	3300.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
3400.00	0.00	0.000	3400.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 18.410 degrees
Bottom hole distance is 4239.49 Feet on azimuth 18.41 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Peterson Energy
Date Printed: 23-Apr-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: SPICER #3-32H ST (PWB)
Wellpath: SPICER #3-32H (PWP#1)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
3500.00	0.00	0.000	3500.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
3600.00	0.00	0.000	3600.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
3700.00	0.00	0.000	3700.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
3800.00	0.00	0.000	3800.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
3900.00	0.00	0.000	3900.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4000.00	0.00	0.000	4000.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4100.00	0.00	0.000	4100.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4200.00	0.00	0.000	4200.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4300.00	0.00	0.000	4300.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4400.00	0.00	0.000	4400.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4500.00	0.00	0.000	4500.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4600.00	0.00	0.000	4600.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4700.00	0.00	0.000	4700.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4800.00	0.00	0.000	4800.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
4900.00	0.00	0.000	4900.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5000.00	0.00	0.000	5000.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5100.00	0.00	0.000	5100.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5200.00	0.00	0.000	5200.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5300.00	0.00	0.000	5300.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5400.00	0.00	0.000	5400.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5500.00	0.00	0.000	5500.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5600.00	0.00	0.000	5600.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5700.00	0.00	0.000	5700.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5800.00	0.00	0.000	5800.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
5900.00	0.00	0.000	5900.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
6000.00	0.00	0.000	6000.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
6100.00	0.00	0.000	6100.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
6200.00	0.00	0.000	6200.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
6300.00	0.00	0.000	6300.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
6400.00	0.00	0.000	6400.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
6500.00	0.00	0.000	6500.00	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
6572.53	0.00	0.000	6572.53	0.00N	0.00E	==>	0.00	1436604.82	2748579.57
6672.53	12.40	17.380	6671.75	10.29N	3.22E	12.40	10.78	1436615.11	2748582.79
6772.53	24.80	17.380	6766.34	40.67N	12.73E	12.40	42.61	1436645.49	2748592.30
6872.53	37.20	17.380	6851.89	89.72N	28.09E	12.40	94.00	1436694.54	2748607.65
6934.97	44.94	17.380	6898.93	128.84N	40.33E	12.40	134.99	1436733.66	2748619.90
6956.69	44.94	17.380	6914.30	143.48N	44.91E	==>	150.32	1436748.30	2748624.48
7000.00	50.31	17.570	6943.48	173.99N	54.52E	12.40	182.31	1436778.81	2748634.09
7100.00	62.71	17.920	6998.55	253.26N	79.91E	12.40	265.54	1436858.08	2748659.47
7200.00	75.11	18.190	7034.47	341.79N	108.77E	12.40	358.65	1436946.60	2748688.34
7300.00	87.50	18.440	7049.56	435.45N	139.78E	12.40	457.31	1437040.26	2748719.34
7320.14	90.00	18.480	7050.00	454.55N	146.15E	12.40	477.44	1437059.36	2748725.71
7400.00	90.00	18.480	7050.00	530.29N	171.47E	==>	557.30	1437135.10	2748751.03
7500.00	90.00	18.480	7050.00	625.13N	203.17E	==>	657.30	1437229.93	2748782.73
7600.00	90.00	18.480	7050.00	719.97N	234.87E	==>	757.30	1437324.77	2748814.43
7700.00	90.00	18.480	7050.00	814.82N	266.58E	==>	857.30	1437419.61	2748846.14
7800.00	90.00	18.480	7050.00	909.66N	298.28E	==>	957.30	1437514.45	2748877.84
7900.00	90.00	18.480	7050.00	1004.50N	329.98E	==>	1057.30	1437609.29	2748909.54
8000.00	90.00	18.480	7050.00	1099.34N	361.69E	==>	1157.30	1437704.13	2748941.24
8100.00	90.00	18.480	7050.00	1194.18N	393.39E	==>	1257.30	1437798.96	2748972.94
8200.00	90.00	18.480	7050.00	1289.02N	425.09E	==>	1357.30	1437893.80	2749004.65
8300.00	90.00	18.480	7050.00	1383.87N	456.80E	==>	1457.30	1437988.64	2749036.35
8400.00	90.00	18.480	7050.00	1478.71N	488.50E	==>	1557.30	1438083.48	2749068.05
8500.00	90.00	18.480	7050.00	1573.55N	520.20E	==>	1657.30	1438178.32	2749099.75
8600.00	90.00	18.480	7050.00	1668.39N	551.90E	==>	1757.30	1438273.16	2749131.45
8700.00	90.00	18.480	7050.00	1763.23N	583.61E	==>	1857.30	1438368.00	2749163.16
8800.00	90.00	18.480	7050.00	1858.07N	615.31E	==>	1957.30	1438462.83	2749194.86
8900.00	90.00	18.480	7050.00	1952.91N	647.01E	==>	2057.30	1438557.67	2749226.56
9000.00	90.00	18.480	7050.00	2047.76N	678.72E	==>	2157.30	1438652.51	2749258.26
9100.00	90.00	18.480	7050.00	2142.60N	710.42E	==>	2257.30	1438747.35	2749289.96
9200.00	90.00	18.480	7050.00	2237.44N	742.12E	==>	2357.30	1438842.19	2749321.66

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 18.410 degrees
Bottom hole distance is 4239.49 Feet on azimuth 18.41 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Peterson Energy
Date Printed: 23-Apr-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC
 SYSDRILL
 Well Design Combined Report
 Wellbore: SPICER #3-32H ST (PWB)
 Wellpath: SPICER #3-32H (PWP#1)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
9300.00	90.00	18.480	7050.00	2332.28N	773.83E	==>	2457.30	1438937.03	2749353.37
9400.00	90.00	18.480	7050.00	2427.12N	805.53E	==>	2557.30	1439031.86	2749385.07
9500.00	90.00	18.480	7050.00	2521.96N	837.23E	==>	2657.30	1439126.70	2749416.77
9600.00	90.00	18.480	7050.00	2616.81N	868.93E	==>	2757.30	1439221.54	2749448.47
9700.00	90.00	18.480	7050.00	2711.65N	900.64E	==>	2857.30	1439316.38	2749480.17
9800.00	90.00	18.480	7050.00	2806.49N	932.34E	==>	2957.30	1439411.22	2749511.88
9900.00	90.00	18.480	7050.00	2901.33N	964.04E	==>	3057.30	1439506.06	2749543.58
10000.00	90.00	18.480	7050.00	2996.17N	995.75E	==>	3157.30	1439600.89	2749575.28
10100.00	90.00	18.480	7050.00	3091.01N	1027.45E	==>	3257.30	1439695.73	2749606.98
10200.00	90.00	18.480	7050.00	3185.85N	1059.15E	==>	3357.30	1439790.57	2749638.68
10300.00	90.00	18.480	7050.00	3280.70N	1090.86E	==>	3457.30	1439885.41	2749670.39
10400.00	90.00	18.480	7050.00	3375.54N	1122.56E	==>	3557.30	1439980.25	2749702.09
10500.00	90.00	18.480	7050.00	3470.38N	1154.26E	==>	3657.30	1440075.09	2749733.79
10600.00	90.00	18.480	7050.00	3565.22N	1185.96E	==>	3757.30	1440169.92	2749765.49
10700.00	90.00	18.480	7050.00	3660.06N	1217.67E	==>	3857.30	1440264.76	2749797.19
10800.00	90.00	18.480	7050.00	3754.90N	1249.37E	==>	3957.30	1440359.60	2749828.90
10900.00	90.00	18.480	7050.00	3849.75N	1281.07E	==>	4057.30	1440454.44	2749860.60
11000.00	90.00	18.480	7050.00	3944.59N	1312.78E	==>	4157.30	1440549.28	2749892.30
11082.19	90.00	18.480	7050.00	4022.53N	1338.83E	==>	4239.49	1440627.22	2749918.35

All data is in Feet unless otherwise stated
 Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 0.00ft above Mean Sea Level)
 Vertical Section is from 0.00N 0.00E on azimuth 18.410 degrees
 Bottom hole distance is 4239.49 Feet on azimuth 18.41 degrees from Wellhead
 Calculation method uses Minimum Curvature method
 Prepared by Peterson Energy
 Date Printed: 23-Apr-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC

SYSDRILL

Well Design Combined Report

Wellbore: SPICER #3-32H ST (PWB)

Wellpath: SPICER #3-32H (PWP#1)

Targets

Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
SP - T1	454.55N	146.15E	7050.00	N40 31 46.6057	W106 24 14.2271	1437059.36	2748725.71	23-Apr-2013
SP- T2	4022.53N	1338.83E	7050.00	N40 32 21.9804	W106 23 59.2512	1440627.22	2749918.35	23-Apr-2013

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
21228	Planned	11082.19	7050.00	WdW Rate Gyro	Standard

Notes

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 18.410 degrees
Bottom hole distance is 4239.49 Feet on azimuth 18.41 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Peterson Energy
Date Printed: 23-Apr-2013



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: SPICER #3-32H ST (PWB)
Wellpath: SPICER #3-32H (PWP#1)

Ellipse separations are reported ONLY if BOTH wells have uncertainty data
Only Depth and Magnetic Reference Field error terms are correlated across tie points
Cutoff is calculated on CENTRE to CENTRE distance

Summary data uses Closest Approach clearance calculation for all minima
Hole size/Casings ARE included
Hole size/Casings are NOT subtracted from Centre-Centre distance
Confidence limit of 95.00% / 2.80 SD.

Wellbore		
Name	Created	Last Revised
SPICER #3-32H ST (PWB)	12-Apr-2013	23-Apr-2013

Well		
Name	Government ID	Last Revised
SPICER #3-32H		12-Apr-2013

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #1	1436604.8224	2748579.5675	N40 31 42.0996	W106 24 16.0596	0.00N	0.00E

Installation				
Name	Easting	Northing	Coord System Name	North Alignment
SPICER	2748579.5675	1436604.8224	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Field				
Name	Easting	Northing	Coord System Name	North Alignment
Unnamed	2748579.5675	1436604.8225	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Clearance Summary										
Offset WellName	Offset Wellbore	Offset Slot	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
BUFFALO DITCH #2-32H	BUFFALO DITCH #2-32H (AWB)	BUFFALO DITCH #2-32H	OFFSETS	1655.17	9717.80	11082.19	1607.50	9727.69	23.24	11082.19
DAMFINO #2-06H	DAMFINO #2-06H ST (PWB)	DAMFINO #2-06H	DAMFINO #2-06H	2038.14	6638.01	6638.01	2012.05	6638.01	78.15	6638.01
VANETA #01-32	VANETA #01-32 (AWB)	VANETA #01-32	OFFSETS	2679.81	11082.19	11082.19	2624.57	11082.19	48.51	11082.19
CASTLE #3-30H	CASTLE #3-30H (AWB)	CASTLE #3-30H	OFFSETS	3009.21	11082.19	11082.19	2934.82	11082.19	40.45	11082.19
BUFFALO DITCH #1-32H	BUFFALO DITCH #1-32H PILOT (AWB)	BUFFALO DITCH #1-32H	OFFSETS	3440.97	10648.04	10648.04	3384.94	10679.13	58.38	11082.19
BUFFALO DITCH #1-32H	BUFFALO DITCH #1-32H HZL (AWB)	BUFFALO DITCH #1-32H	OFFSETS	3459.48	10679.13	10679.13	3403.72	10711.94	58.87	11082.19
JUDY #1-30	JUDY #1-30 (AWB)	JUDY #1-30	OFFSETS	3999.27	11082.19	11082.19	3940.81	11082.19	68.41	11082.19
MUTUAL #2-30H	MUTUAL #2-30H (AWB)	MUTUAL #2-30H	OFFSETS	4102.01	11082.19	11082.19	4035.54	11082.19	61.72	11082.19
MUTUAL #4-30H	MUTUAL #4-30H (PWB)	Slot #1	MUTUAL 4-30H	4313.26	10581.84	10581.84	4273.43	10613.52	99.36	11082.19

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 18.410 degrees
Prepared by Peterson Energy
Date Printed: 24-Apr-2013



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: SPICER #3-32H ST (PWB)
Wellpath: SPICER #3-32H (PWP#1)

Clearance Summary										
Offset WellName	Offset Wellbore	Offset Slot	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
DAMFINO #2-06H	DAMFINO #2-06H PILOT (PWB)	DAMFINO #2-06H	DAMFINO #2-06H	6683.23	6572.53	6572.53	6672.65	6572.53	609.29	7086.61
SURPRISE #4-06H	SURPRISE #4-06H (AWB)	SURPRISE #4-06H	OFFSETS	6699.41	820.21	1263.12	6696.20	820.21	309.96	6988.19

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 18.410 degrees
Prepared by Peterson Energy
Date Printed: 24-Apr-2013