PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Cimarex Energy Company
LEASE NO.:	NM26394
WELL NAME & NO.:	Vaca Draw 20 17 Federal – 10H
SURFACE HOLE FOOTAGE:	330'/S & 2010'/W
BOTTOM HOLE FOOTAGE	330'/N & 2330/W, sec. 17
LOCATION:	Sec. 20, T. 25 S, R. 33 E
COUNTY:	Lea County

COA

H2S	◉ Yes	○ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP

A. Hydrogen Sulfide

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **1034** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

Approval Date: 12/21/2017

d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Operator shall filled 1/3rd of casing with fluid while running intermediate casing to maintain collapse safety factor.

2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is: Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

   a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

      - Second stage above DV tool:Cement to surface. If cement does not circulate, contact the appropriate BLM office.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
   - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **Additional cement maybe required. Excess calculates to be 13%.**

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7-5/8** intermediate casing shoe shall be **10,000 (10M)** psi.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. **On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.**

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. **If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:**
    a. **Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.**
    b. **If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.**
    c. **Manufacturer representative shall install the test plug for the initial BOP test.**
    d. **If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.**
    e. **Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.**

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

    c. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.

    d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE.

If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes. This test shall be performed prior to the test at full stack pressure.

g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

ZS 122017

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SURFACE USE
CONDITIONS OF APPROVAL

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SURFACE HOLE FOOTAGE:	330'/S & 2010'/W
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COUNTY:	Lea County, New Mexico

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Belwo Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Cultural

An arch monitor must be present. Please see attached arch stipulation.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching
Ditching shall be required on both sides of the road.

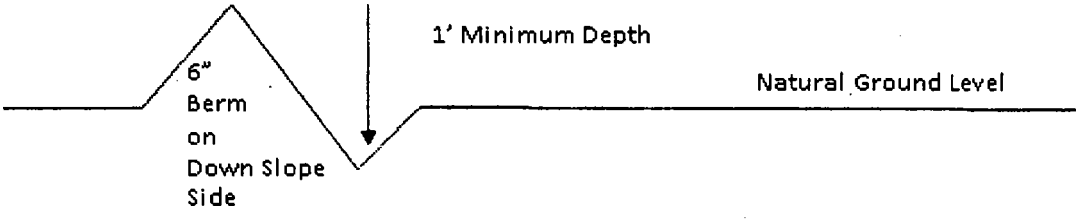
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

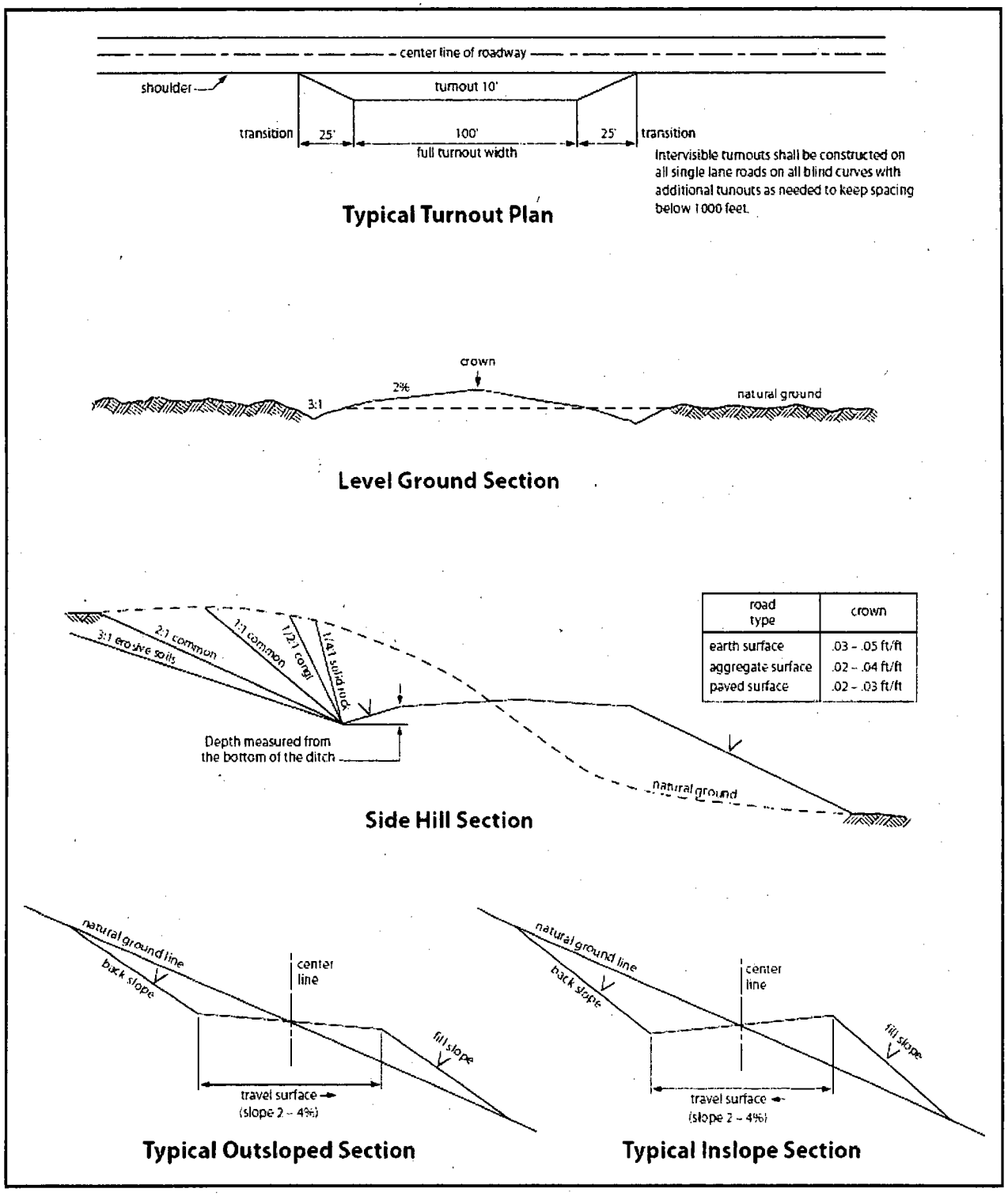


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES
STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (*see* 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third

parties.

4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;

b. Activities of other parties including, but not limited to:
   (1) Land clearing
   (2) Earth-disturbing and earth-moving work
   (3) Blasting
   (4) Vandalism and sabotage;

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of **20** feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.

8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed

is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

17. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

18. Special Stipulations:

a. **Lesser Prairie-Chicken:** Oil and gas activities will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Normal vehicle use on existing roads will not be restricted.

BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to

any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be **30** feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed **20** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)

- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed **30** feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)

- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6___ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

( ) seed mixture 1 ( ) seed mixture 3

() seed mixture 2 ( ) seed mixture 4

(X) seed mixture 2/LPC ( ) Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

19. Special Stipulations:

Lesser Prairie-Chicken

Oil and gas activities will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to

any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:
- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Below Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

Surface Use Plan

Vaca Draw 20-17 Federal 2H, 3H, 4H, 9H, 10H, 11H, 12H
UL: N, Sec. 20, 25S, 33E
Lea Co., NM

The following surface use plan of operations will be followed and carried out once the APD is approved. No other disturbance will be created other than what is submitted in this surface use plan without approval. If any other disturbance is needed after the APD is approved, a BLM approved sundry notice or right of way application will be submitted for approval prior to any new surface disturbance.

1. Existing Roads:

- Please see Exhibit B and C-1 for existing access road planned to be used to access the proposed project.
- Cimarex Energy will improve or maintain existing roads in a condition the same as or better than before the operations began. Cimarex Energy will repair pot holes, etc. All existing structures on the entire access route such as cattle guards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.
- Cimarex Energy will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or other events.
- Cimarex Energy will obtain written BLM approval prior to the application of surfactants, binding agents, or other dust suppression chemicals on the roadways.
- The maximum width of the driving surface will be 15.' The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.
- Existing access road route to the proposed project is depicted on the public access point map if applicable. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwise noted in the New or Reconstructed Access Roads section of the surface use plan.
- Beginning at the intersection of Jal highway/Highway 128 and j-1/Orla road to the south (Located in the SW ¼ of Sec. 15-24S-32E, N.M.P.M.) Proceed in a Southerly direction approximately 10.5 miles to the junction of this road and Pipeline road to the East; Turn left and proceed in an Easterly direction approximately 5.0 to the junction of this road and an existing road to the Northwest; turn left and proceed in a Northwesterly, then Northeasterly, then Northwesterly direction approximately 3.3 miles to the junction of this road and an existing road to the west; turn left and proceed in a Westerly direction approximately .6 miles to the beginning of the proposed access road to the North; follow road flags in a Northerly, then Westerly direction approximately 1,103' to the proposed location.

2. New of Reconstructed Access Roads:

- A new road will be constructed for this project.
  - Cimarex Energy plans to construct 785' of off-lease access road to service the well. The proposed access road does cross lease boundaries, a right of way grant will be submitted to and obtained from the BLM.
  - The maximum width of the driving surface will be 15'. The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.
  - Proposed and existing access road route to the proposed wellsite is depicted on Exhibit C-2. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done without prior approval from the BLM.
  - The operator will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or other events.

3. Well Radius Map

Please see Exhibit A for wells within one mile of the proposed well SHL and BHL.

Surface Use Plan

Vaca Draw 20-17 Federal 2H, 3H, 4H, 9H, 10H, 11H, 12H

UL: N, Sec. 20, 25S, 33E

Lea Co., NM

4. Proposed Off Pad Production Facilities:

- If on completion this well is a producer, a tank battery will be used and the necessary production equipment will be installed and production will be sent to the Vaca Draw 20-17 Federal Battery.
    - Please see Exhibit P and Exhibit P-1 for location of the off pad central tank battery.
    - An additional road 314' to access the battery will be constructed. Please see Exhibit P-2.
    - Allocation will be based on well test. Route is on lease, please see Exhibit G. Any changes to on lease route will be submitted via sundry notice. If route is off lease, a right of way will be submitted to the BLM for approval.

5. Production Flowlines:

- Cimarex Energy plans to construct on lease flowlines to service the well. Lines will be buried and require a construction width of 30'.
    - Specifications: 4" HP steel for oil, gas, and water production. 4" HP steel for gas lift.
    - Length of Gas Lift Line: 1,588'
    - Length of Flowlines: 1,533'
    - MAOP: 1500 psi.
    - Anticipated working pressure: 200-300 psi.

6. Gas Pipeline:

- Cimarex plans to construct an off lease gas pipeline to service this battery location.
    - Please see Exhibit G for pipeline route
    - Specification of pipeline: 12" LP Steel, 8" HP Steel, 4" HP Steel
    - Line will be buried and will require a construction width of 30'
    - Length: 14172'
    - MAOP: 1440 psi.
    - Anticipated working pressure: 12"; 300 psi; 8" & 4": 1100 psi.

7. Salt Water Disposal:

- Cimarex plans to construct off lease SWD pipelines. Due to expected development in the area, this route provides for disposal at 3 facilities
    - Specifications: One 4" Surface poly, One 12" Buried poly. Both pipelines follow the same route
    - Length: 40,426.72'
    - MAOP: 4" line: 120 psi; 12" line: 150 psi
    - Anticipated Working Pressure: 4" line: 110 psi; 12" line: 225 psi
    - Pipeline follows an existing road and will be constructed 20-30' from and parallel to the road.
    - A ROW will be filed for the route with the BLM and State of New Mexico

8. Electric Lines:

- Cimarex Energy plans to construct an off-lease electric line to service the well. The proposed electric line does cross lease boundaries, a right of way grant will be submitted to and obtained from the BLM.
    - Cimarex Energy plans to install and overhead electric line from the proposed well to an existing overhead electric line located in NW of section 29. The proposed electric line will be 2049' in length, 7-40' poles, 480 volt, 4 wire, 3 phase. The electric line will exit off the West side of the well location and travel South 2049' until it would intercept the existing electric line.
    - The electric line will be routed on the East side of lease road and 25-35' from and parallel to lease road in the SWSW of sec 20 and NWNW of sec 29.
    - Please see Exhibit H. Any changes to E-Line route will be submitted via sundry notice.

Surface Use Plan

Vaca Draw 20-17 Federal 2H, 3H, 4H, 9H, 10H, 11H, 12H

UL: N, Sec. 20, 25S, 33E

Lea Co., NM

9. Fresh Water Temporary ROW:

- A temporary surface fresh water pipeline(s) will be utilized for this project.
  - The surface pipeline(s) will follow the road from a frac pit to the well.
  - Cimarex plans to lay the fresh water surface pipeline(s) prior to commencement of the simulation job.
  - Fresh water will be purchased from a 3rd party
  - See Exhibit K for proposed route
  - Specification of line: 10" lay-flat surface pipeline
  - Length: 3,104'
  - Operating pressure: <140 psi

10. Construction Material:

- If possible, native caliche will be obtained from the excavation of drill site. The primary way of obtaining caliche will be by "turning over" the location. This means caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cu yds. is the max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel:
- The top 6 inches of topsoil is pushed off and stockpiled along the side of the location
- An approximate 120' x 120' area is used within the proposed well site to remove caliche
- Subsoil is removed and piled alongside the 120' by 120' area within the pad site.
- When caliche is found, material will be stockpiled within the pad site to build the location and road.
- Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.
- Once well is drilled, the stockpiled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in Exhibit D – Rig Layout Diagram.
- In the event that no caliche is found onsite, caliche will be hauled in from BLM-approved caliche pit.

11. Methods of Handling Waste:

- Drilling fluids, produced oil, and water from the well during drilling and completion operations will be stored safely and disposed of properly in a NMOCD approved disposal facility.
- Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around well site will be collected for disposal.
- Human waste and grey water will be properly contained and disposed of properly at a state approved disposal site.
- After drilling and completion operations, trash, chemicals, salts, frac sand and other waste will be removed and disposed of properly at a state approved disposal site.
- The well will be drilled utilizing a closed loop system. Drill cuttings will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.

12. Ancillary Facilities:

No camps or airstrips to be constructed

13. Well Site Layout:

- Exhibit D: Rig Layout
  - The rig layout, flare line and v-door are subject to change depending on rig availability. The pad dimensions and orientation will remain the same and will not require additional surface disturbance.
- Exhibit D-2: Well Site layout plat
- Mud pits in the closed circulation system will be steel pits and the cuttings will be stored in steel containment pits.
- Cuttings will be stored in steel pits until they are hauled to a state-approved disposal facility.
- If the well is a producer, those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements. Exhibit D-1: Interim Reclamation Diagram.

Surface Use Plan

Vaca Draw 20-17 Federal 2H, 3H, 4H, 9H, 10H, 11H, 12H

UL: N, Sec. 20, 25S, 33E

Lea Co., NM

14. Interim and Final Reclamation:

- Rehabilitation of the location will start in a timely manner after all proposed drilling wells have been drilled from the pad or if drilling operations have ceased as indicated below:
  - No approved or pending drill permits for wells located on this drill pad **or**
  - No drilling activity for 5 years from this drill pad
- In areas planned for interim and final reclamation, surfacing materials will be removed and returned to a mineral pit or recycled to repair or build roads and well pads.
- Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.
- Exhibit D-1 illustrates the proposed Interim Reclamation plans after cessation of drilling operations as outlined above.
  - The areas of the location not essential to production facilities and operations will be reclaimed and seeded per BLM requirements.

15. Surface Ownership:

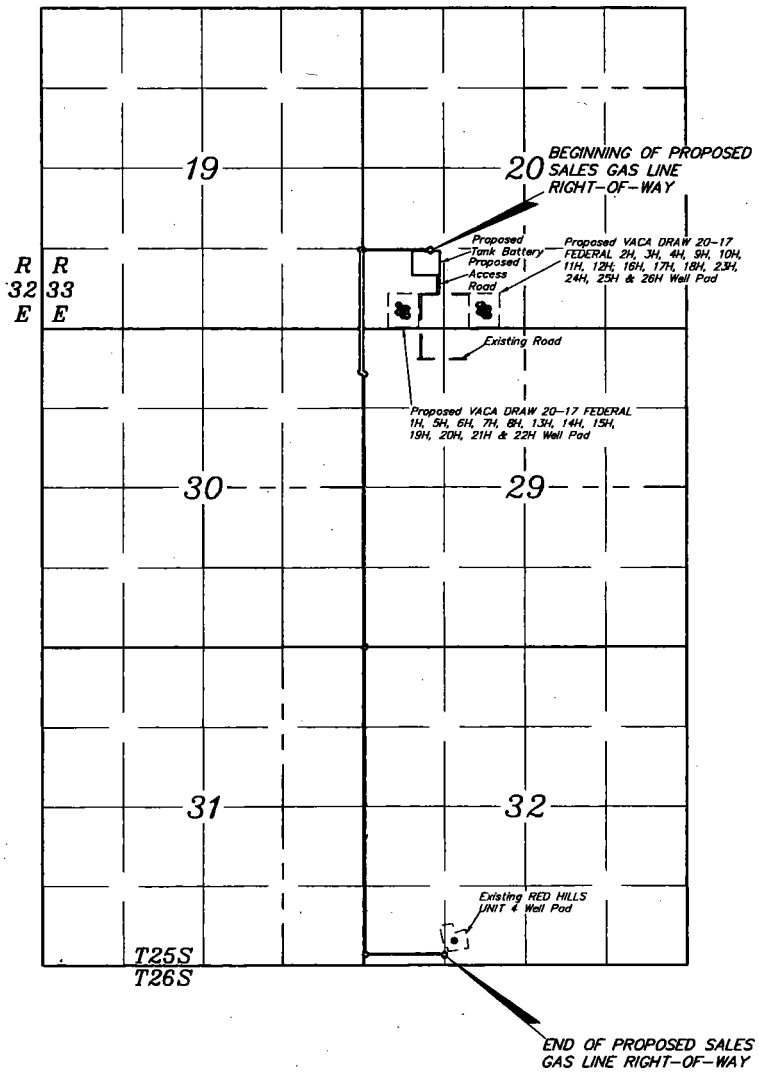
- The wellsite is on surface owned by Bureau of Land Management, 620 E Greene Street Carlsbad, NM 88220, 575-234-5972.
- The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.

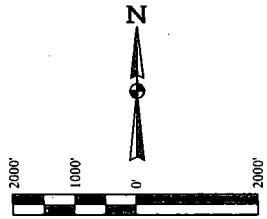
16. Other Information:

- Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- In lieu of an archaeological survey report, Cimarex will be submitting an MOA for this well pad and proposed road as they are located within the MOA boundary.
- There are no known dwellings within 1½ miles of this location.

17. On Site Notes and Information:

Onsite with BLM (Jeff Robertson) and Cimarex (Barry Hunt) on December 8, 2016. 500' X 560' pad (From #1H pad is 190' north, 180' west, 370' south and 320' east). Top soil west. Interim reclamation: All sides. Access road from SE corner of pad, south, to the east/west lease road to the Cascade 29 Federal 1H.





LEGEND:

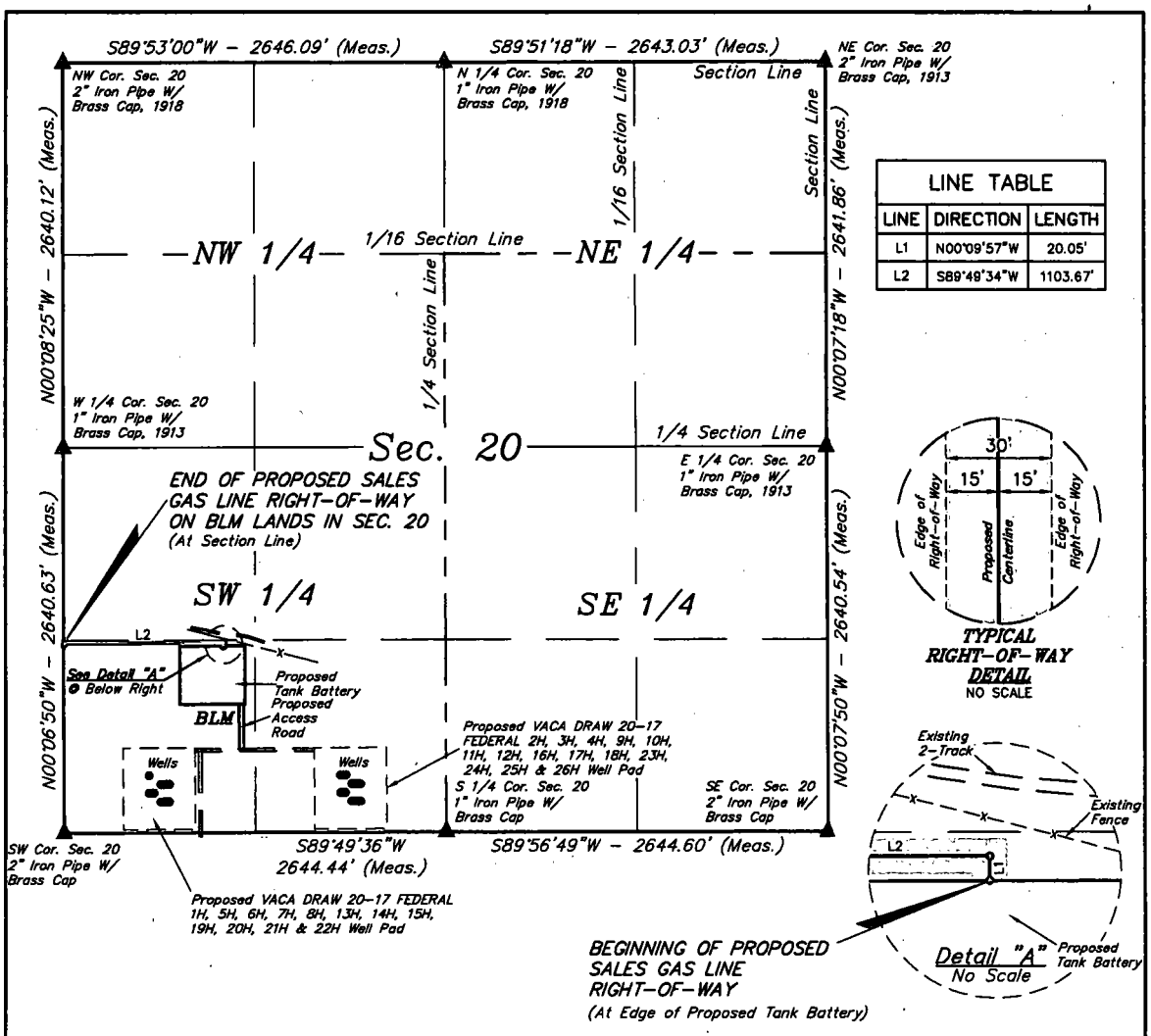
- PROPOSED CENTERLINE
- SECTION LINE
- 1/4 SECTION LINE
- 1/16 SECTION LINE

CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTIONS 19, 20, 29, 30 & 32, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	1" = 2000'

OVERALL SALES GAS PIPELINE OPTION A MAP



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N00°09'57"W	20.05'
L2	S89°49'34"W	1103.67'

SALES GAS LINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS IN SEC. 20

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE SW 1/4 SW 1/4 OF SECTION 20, T25S, R33E, N.M.P.M., WHICH BEARS N40°38'12"E 1690.79' FROM THE SOUTHWEST CORNER OF SAID SECTION 20, THENCE N00°09'57"W 20.05'; THENCE S89°49'34"W 1103.67' TO A POINT ON THE WEST LINE OF THE SW 1/4 SW 1/4 OF SAID SECTION 20, WHICH BEARS N00°06'50"W 1299.77' FROM THE SOUTHWEST CORNER OF SAID SECTION 20. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.774 ACRES MORE OR LESS.

BEGINNING OF SALES GAS LINE BEARS N40°38'12"E 1690.79' FROM THE SOUTHWEST CORNER OF SECTION 20, T25S, R33E, N.M.P.M.

END OF SALES GAS LINE ON BLM LANDS IN SEC. 20 BEARS N00°06'50"W 1299.77' FROM THE SOUTHWEST CORNER OF SECTION 20, T25S, R33E, N.M.P.M.

1000' 500' 0' 1000'

ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
SEC. 20 (SW 1/4)	BLM	1123.72	68.10	0.774

▲ = SECTION CORNERS LOCATED.

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BRENT BUCKNER 23782 PROFESSIONAL SURVEYOR 02-04-17

FILE: 61388-A1

Sheet 1 of 2

NOTES:
- Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

N

CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTION 20, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	N/A

SALES GAS LINE R-O-W OPTION "A"

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
SECTION CORNER	DESCRIPTION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP, 1918	N 32°07'24.04"	W 103°36'10.23"
N 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1918	N 32°07'24.02"	W 103°35'39.47"
NE COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP, 1913	N 32°07'24.02"	W 103°35'08.74"
E 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°06'57.88"	W 103°35'08.76"
W 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°06'57.92"	W 103°36'10.23"
SW COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.79"	W 103°36'10.25"
S 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'31.80"	W 103°35'39.51"
SE COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.76"	W 103°35'08.77"

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°06'44.46"	W 103°35'57.41"
1	0+20.05	N 32°06'44.66"	W 103°35'57.41"
END	11+23.72	N 32°06'44.65"	W 103°36'10.24"

CERTIFICATE

THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BRAD D. HARRIS 23782 PROFESSIONAL SURVEYOR 02-04-17

FILE: 61388-A2

NOTES:

CIMAREX ENERGY CO.

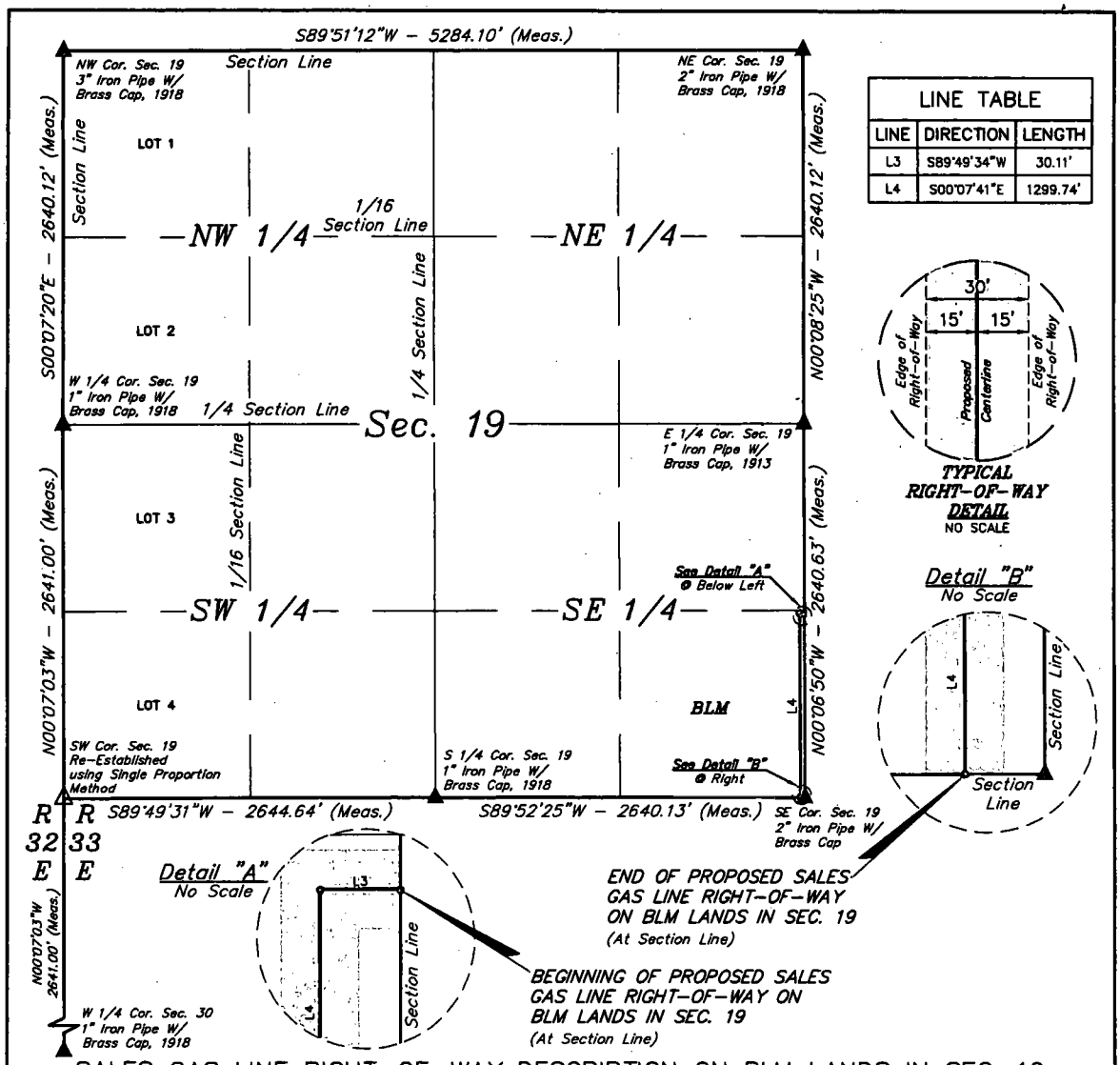
VACA DRAW 20-17 FEDERAL BATTERY
SECTION 20, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	N/A

SALES GAS LINE R-O-W OPTION "A"

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



LINE TABLE		
LINE	DIRECTION	LENGTH
L3	S89°49'34"W	30.11'
L4	S00°07'41"E	1299.74'

SALES GAS LINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS IN SEC. 19

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT ON THE EAST LINE OF THE SE 1/4 SE 1/4 OF SECTION 19, T25S, R33E, N.M.P.M., WHICH BEARS N00°06'50"W 1299.77' FROM THE SOUTHEAST CORNER OF SAID SECTION 19, THENCE S89°49'34"W 30.11'; THENCE S00°07'41"E 1299.74' TO A POINT ON THE SOUTH LINE OF THE SE 1/4 SE 1/4 OF SAID SECTION 19, WHICH BEARS S89°52'25"W 29.79' FROM THE SOUTHEAST CORNER OF SAID SECTION 19. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.916 ACRES MORE OR LESS.

BEGINNING OF SALES GAS LINE ON BLM LANDS IN SEC. 19 BEARS N00°06'50"W 1299.77' FROM THE SOUTHEAST CORNER OF SECTION 19, T25S, R33E, N.M.P.M.

END OF SALES GAS LINE GAS LINE ON BLM LANDS IN SEC. 19 BEARS S89°52'25"W 29.79' FROM THE SOUTHEAST CORNER OF SECTION 19, T25S, R33E, N.M.P.M.

1000' 500' 0' 1000'

ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
SEC. 19 (SE 1/4)	BLM	1329.85	80.60	0.916

▲ = SECTION CORNERS LOCATED.
△ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO 23782 PROFESSIONAL SURVEYOR 02-04-17

FILE: 61388-B1

Sheet 1 of 2

NOTES:
- Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

N

CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTION 19, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	1" = 1000'

SALES GAS LINE R-O-W OPTION "A"

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
SECTION CORNER	DESCRIPTION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 19, T25S, R33E	3" IRON PIPE W/ BRASS CAP, 1918	N 32°07'24.04"	W 103°37'11.66"
NE COR. SEC. 19, T25S, R33E	2" IRON PIPE W/ BRASS CAP, 1918	N 32°07'24.04"	W 103°36'10.23"
E 1/4 COR. SEC. 19, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°06'57.92"	W 103°36'10.23"
W 1/4 COR. SEC. 19, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°06'57.92"	W 103°37'11.67"
SW COR. SEC. 19, T25S, R33E	RE-ESTABLISHED	N 32°06'31.79"	W 103°37'11.69"
S 1/4 COR. SEC. 19, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1918	N 32°06'31.80"	W 103°36'40.94"
SE COR. SEC. 19, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.79"	W 103°36'10.25"
W 1/4 COR. SEC. 30, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°06'05.66"	W 103°37'11.70"

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	11+23.72	N 32°06'44.65"	W 103°36'10.24"
1	11+53.83	N 32°06'44.65"	W 103°36'10.59"
END	24+53.58	N 32°06'31.79"	W 103°36'10.60"

CERTIFICATE

THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BRENT D. BACHER
NEW MEXICO
23782
PROFESSIONAL SURVEYOR
02-04-17

FILE: 61388-B2

Sheet 2 of 2

NOTES:

CIMAREX ENERGY CO.

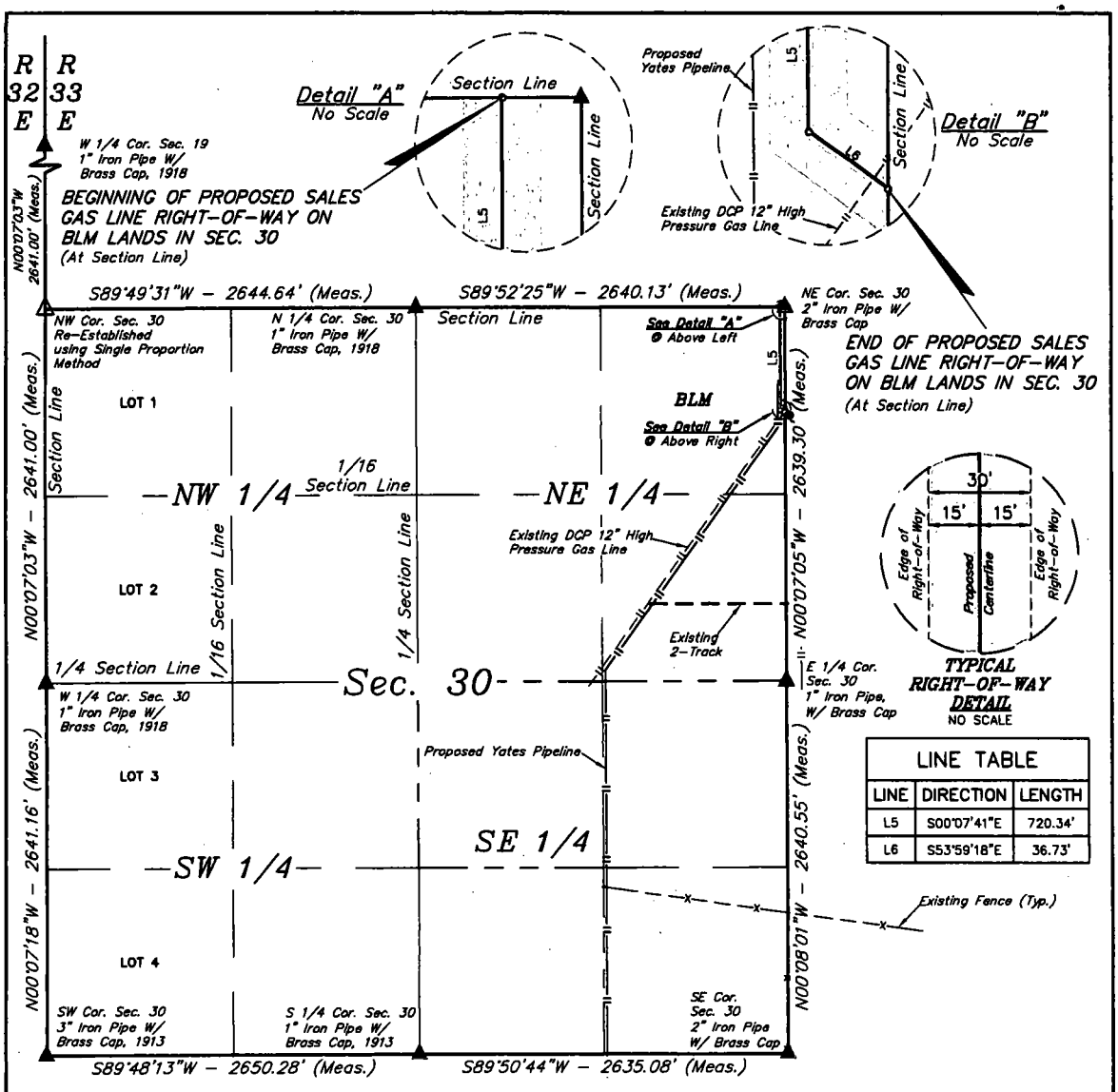
VACA DRAW 20-17 FEDERAL BATTERY
SECTION 19, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	N/A

SALES GAS LINE R-O-W OPTION "A"

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



LINE TABLE		
LINE	DIRECTION	LENGTH
L5	S00°07'41"E	720.34'
L6	S53°59'18"E	36.73'

SALES GAS LINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS IN SEC. 30

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT ON THE NORTH LINE OF THE NE 1/4 NE 1/4 OF SECTION 30, T25S, R33E, N.M.P.M., WHICH BEARS S89°52'25"W 29.79' FROM THE NORTHEAST CORNER OF SAID SECTION 30, THENCE S00°07'41"E 720.34'; THENCE S53°59'18"E 36.73' TO A POINT ON THE EAST LINE OF THE NE 1/4 NE 1/4 OF SAID SECTION 30, WHICH BEARS S00°07'05"E 742.00' FROM THE NORTHEAST CORNER OF SAID SECTION 30. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.521 ACRES MORE OR LESS.

BEGINNING OF SALES GAS LINE ON BLM LANDS IN SEC. 30 BEARS S89°52'25"W 29.79' FROM THE NORTHEAST CORNER OF SECTION 30, T25S, R33E, N.M.P.M.

END OF SALES GAS LINE ON BLM LANDS IN SEC. 30 BEARS S00°07'05"E 742.00' FROM THE NORTHEAST CORNER OF SECTION 30, T25S, R33E, N.M.P.M.

1000' 500' 0' 1000'

ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
SEC. 30 (NE 1/4)	BLM	757.07	45.88	0.521

▲ = SECTION CORNERS LOCATED.
△ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO 23782 PROFESSIONAL SURVEYOR 02-04-17

FILE: 61388-C1

Sheet 1 of 2

NOTES:
- Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

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CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTION 30, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	1" = 1000'

SALES GAS LINE R-O-W OPTION "A"

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
SECTION CORNER	DESCRIPTION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 30, T25S, R33E	RE-ESTABLISHED	N 32°06'31.79"	W 103°37'11.69"
N 1/4 COR. SEC. 30, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1918	N 32°06'31.80"	W 103°36'40.94"
NE COR. SEC. 30, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.79"	W 103°36'10.25"
E 1/4 COR. SEC. 30, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'05.68"	W 103°36'10.27"
W 1/4 COR. SEC. 30, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1918	N 32°06'05.66"	W 103°37'11.70"
SW COR. SEC. 30, T25S, R33E	3" IRON PIPE W/ BRASS CAP, 1913	N 32°05'39.53"	W 103°37'11.71"
S 1/4 COR. SEC. 30, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°05'39.55"	W 103°36'40.90"
SE COR. SEC. 30, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°05'39.55"	W 103°36'10.28"
W 1/4 COR. SEC. 19, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1918	N 32°06'57.92"	W 103°37'11.67"

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	24+53.58	N 32°06'31.79"	W 103°36'10.60"
1	31+73.92	N 32°06'24.67"	W 103°36'10.60"
END	32+10.64	N 32°06'24.45"	W 103°36'10.26"

CERTIFICATE

THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NEW MEXICO 23782 PROFESSIONAL SURVEYOR 02-04-17

FILE: 61388-C2

Sheet 2 of 2

NOTES:

CIMAREX ENERGY CO.

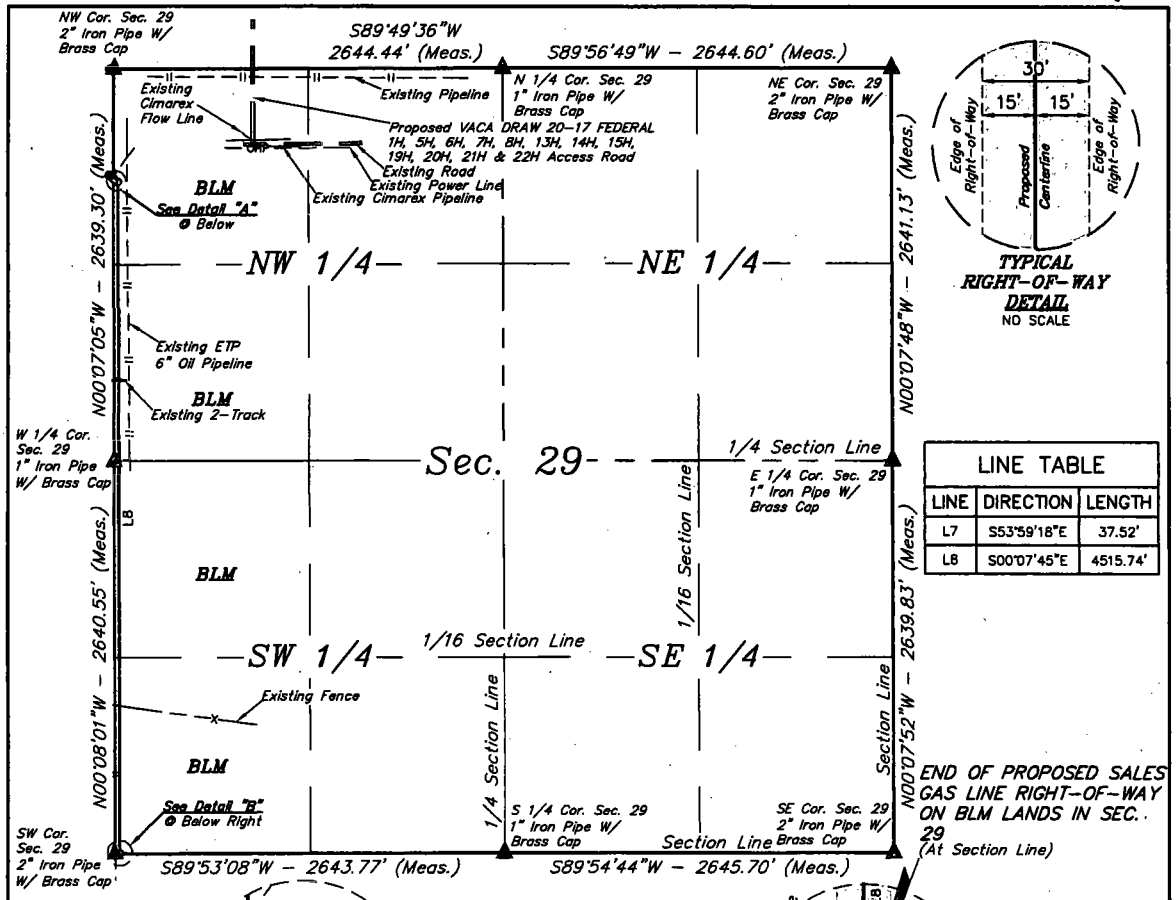
VACA DRAW 20-17 FEDERAL BATTERY
SECTION 30, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	N/A

SALES GAS LINE R-O-W OPTION "A"



LINE TABLE		
LINE	DIRECTION	LENGTH
L7	S53°59'18"E	37.52'
L8	S00°07'45"E	4515.74'

SALES GAS LINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS IN SEC. 29

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT ON THE WEST LINE OF NW 1/4 NW 1/4 OF SECTION 29, T25S, R33E, N.M.P.M., WHICH BEARS S00°07'05"E 742.00' FROM THE NORTHWEST CORNER OF SAID SECTION 29, THENCE S53°59'18"E 37.52'; THENCE S00°07'45"E 4515.74' TO A POINT ON THE SOUTH LINE OF SW 1/4 SW 1/4 OF SAID SECTION 29, WHICH BEARS N89°53'08"E 30.46' FROM THE SOUTHWEST CORNER OF SAID SECTION 29. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 3.136 ACRES MORE OR LESS.

BEGINNING OF SALES GAS LINE ON BLM LANDS IN SEC. 29 BEARS S00°07'05"E 742.00' FROM THE NORTHWEST CORNER OF SECTION 29, T25S, R33E, N.M.P.M.

END OF SALES GAS LINE ON BLM LANDS IN SEC. 29 BEARS N89°53'08"E 30.46' FROM THE SOUTHWEST CORNER OF SECTION 29, T25S, R33E, N.M.P.M.

1000' 500' 0' 1000'

ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
SEC. 29 (NW 1/4)	BLM	1912.71	115.92	1.317
SEC. 29 (SW 1/4)	BLM	2640.54	160.03	1.819
TOTAL		4553.26	275.96	3.136

▲ = SECTION CORNERS LOCATED.

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO
23782
PROFESSIONAL SURVEYOR
02-04-17

FILE: 61388-D1

Sheet 1 of 2

NOTES:
- Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

N

CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTION 29, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	1" = 1000'

SALES GAS LINE R-O-W OPTION "A"

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
SECTION CORNER	DESCRIPTION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 29, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.79"	W 103°36'10.25"
N 1/4 COR. SEC. 29, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'31.80"	W 103°35'39.51"
NE COR. SEC. 29, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.76"	W 103°35'08.77"
E 1/4 COR. SEC. 29, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'05.62"	W 103°35'08.79"
W 1/4 COR. SEC. 29, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'05.68"	W 103°36'10.27"
SW COR. SEC. 29, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°05'39.55"	W 103°36'10.28"
S 1/4 COR. SEC. 29, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°05'39.54"	W 103°35'39.55"
SE COR. SEC. 29, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°05'39.51"	W 103°35'08.80"

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	32+10.64	N 32°06'24.45"	W 103°36'10.26"
1	32+48.16	N 32°06'24.23"	W 103°36'09.91"
END	77+63.90	N 32°05'39.55"	W 103°36'09.92"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NEW MEXICO 23782 PROFESSIONAL SURVEYOR 02-04-17

FILE: 61388-D2

NOTES:

CIMAREX ENERGY CO.

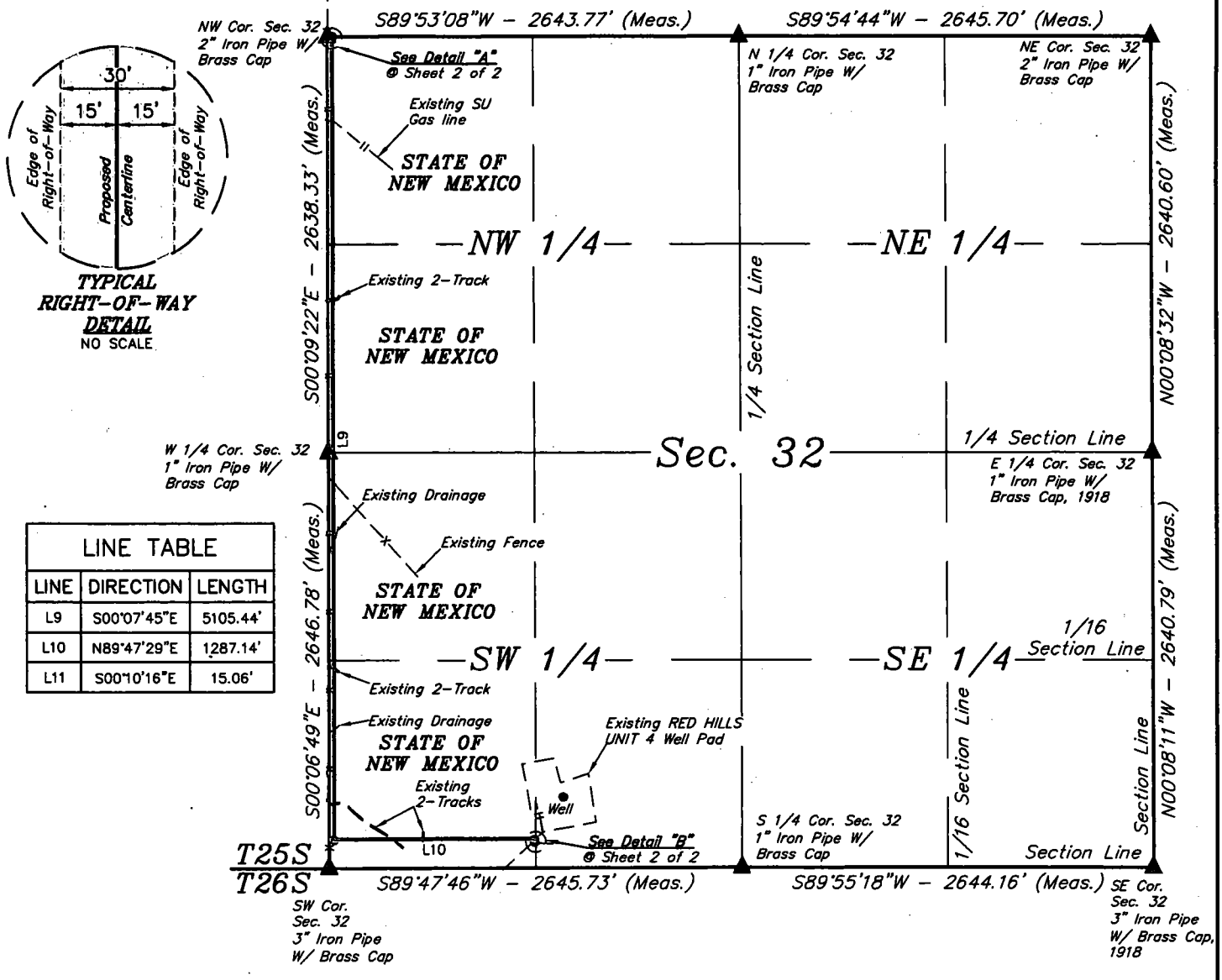
VACA DRAW 20-17 FEDERAL BATTERY
SECTION 29, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	N/A

SALES GAS LINE R-O-W OPTION "A"

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



TYPICAL RIGHT-OF-WAY DETAIL
NO SCALE

LINE TABLE		
LINE	DIRECTION	LENGTH
L9	S00°07'45"E	5105.44'
L10	N89°47'29"E	1287.14'
L11	S00°10'16"E	15.06'

1000' 500' 0' 1000'

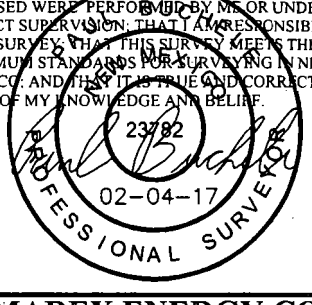
ACREAGE / LENGTH TABLE

	OWNERSHIP	FEET	RODS	ACRES
SEC. 32 (NW 1/4 NW 1/4)	STATE	1319.17	79.95	0.909
SEC. 32 (SW 1/4 NW 1/4)	STATE	1319.17	79.95	0.909
SEC. 32 (NW 1/4 SW 1/4)	STATE	1323.35	80.20	0.911
SEC. 32 (SW 1/4 SW 1/4)	STATE	2445.94	148.24	1.685
TOTAL		6407.64	388.34	4.413

▲ = SECTION CORNERS LOCATED.

CERTIFICATE

THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61388-E1

Sheet 1 of 2

NOTES:
- Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

N

CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTION 32, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	1" = 1000'

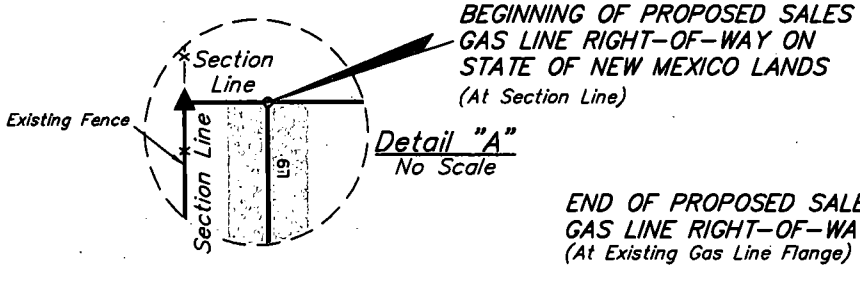
SALES GAS LINE R-O-W OPTION "A"

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SALES GAS LINE RIGHT-OF-WAY DESCRIPTION ON STATE OF NEW MEXICO LANDS

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT ON THE NORTH LINE OF NW 1/4 NW 1/4 OF SECTION 32, T25S, R33E, N.M.P.M., WHICH BEARS N89°53'08"E 30.46' FROM THE NORTHWEST CORNER OF SAID SECTION 32, THENCE S00°07'45"E 5105.44'; THENCE N89°47'29"E 1287.14'; THENCE S00°10'16"E 15.06' TO A POINT IN THE SW 1/4 SW 1/4 OF SAID SECTION 32, WHICH BEARS N82°40'17"E 1327.57' FROM THE SOUTHWEST CORNER OF SAID SECTION 32. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 4.413 ACRES MORE OR LESS.



CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
SECTION CORNER	DESCRIPTION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 32, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°05'39.55"	W 103°36'10.28"
N 1/4 COR. SEC. 32, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°05'39.54"	W 103°35'39.55"
NE COR. SEC. 32, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°05'39.51"	W 103°35'08.80"
E 1/4 COR. SEC. 32, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1918	N 32°05'13.38"	W 103°35'08.81"
W 1/4 COR. SEC. 32, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°05'13.45"	W 103°36'10.27"
SW COR. SEC. 32, T25S, R33E	3" IRON PIPE W/ BRASS CAP	N 32°04'47.26"	W 103°36'10.29"
S 1/4 COR. SEC. 32, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°04'47.29"	W 103°35'39.55"
SE COR. SEC. 32, T25S, R33E	3" IRON PIPE W/ BRASS CAP, 1918	N 32°04'47.25"	W 103°35'08.82"

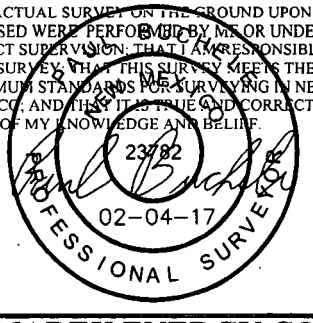
CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	77+63.90	N 32°05'39.55"	W 103°36'09.92"
1	128+69.34	N 32°04'49.04"	W 103°36'09.94"
2	141+56.48	N 32°04'49.05"	W 103°35'54.99"
END	141+71.54	N 32°04'48.90"	W 103°35'54.99"

BEGINNING OF SALES GAS LINE ON STATE OF NEW MEXICO LANDS IN SEC. 32 BEARS N89°53'08"E 30.46' FROM THE NORTHWEST CORNER OF SECTION 32, T25S, R33E, N.M.P.M.

END OF SALES GAS LINE BEARS N82°40'17"E 1327.57' FROM THE SOUTHWEST CORNER OF SECTION 32, T25S, R33E, N.M.P.M.

CERTIFICATE

THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61388-E2

NOTES:

CIMAREX ENERGY CO.

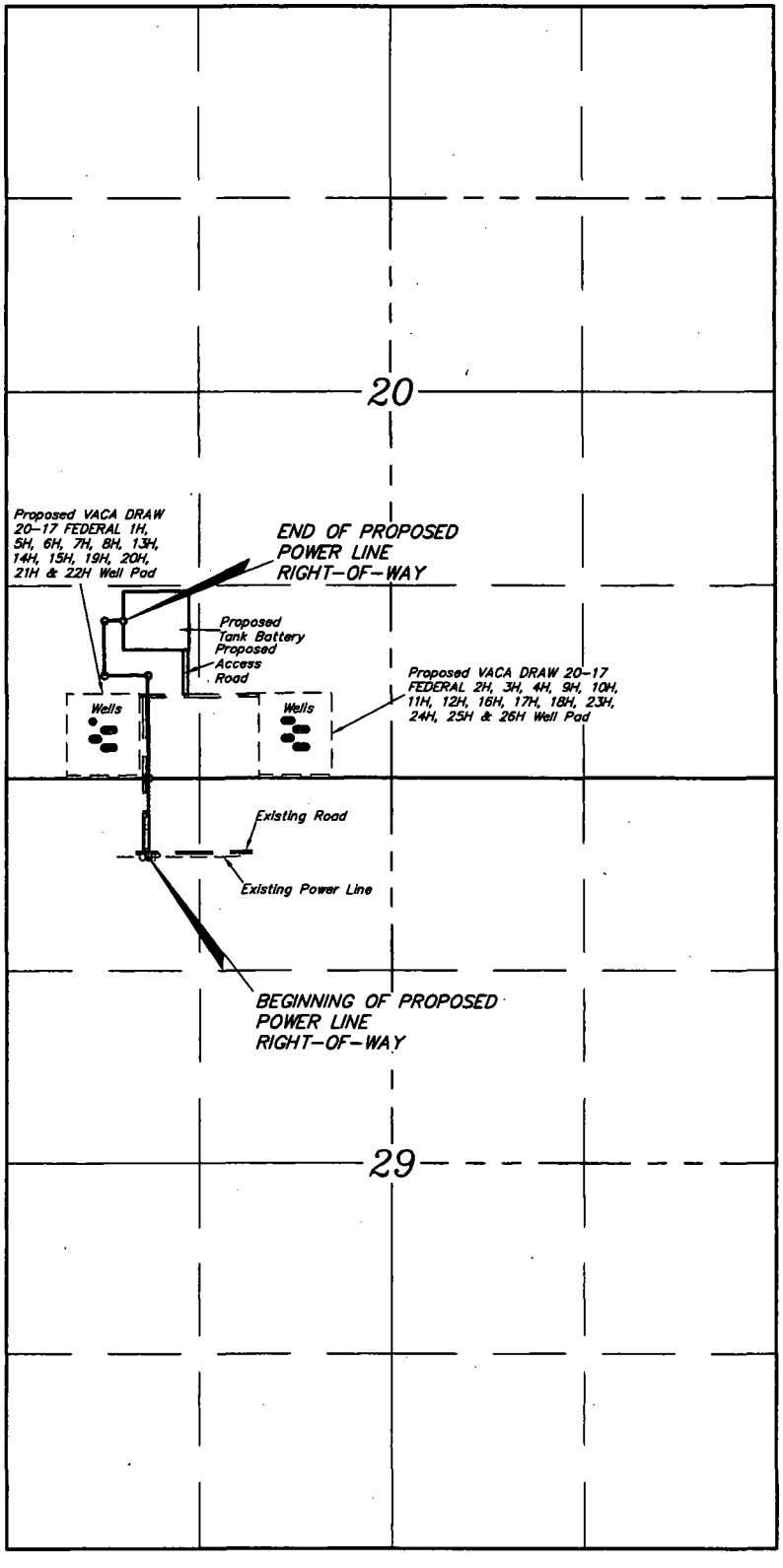
VACA DRAW 20-17 FEDERAL BATTERY
SECTION 32, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	N/A

SALES GAS LINE R-O-W OPTION "A"



LEGEND:

- PROPOSED CENTERLINE
- SECTION LINE
- 1/4 SECTION LINE
- 1/16 SECTION LINE

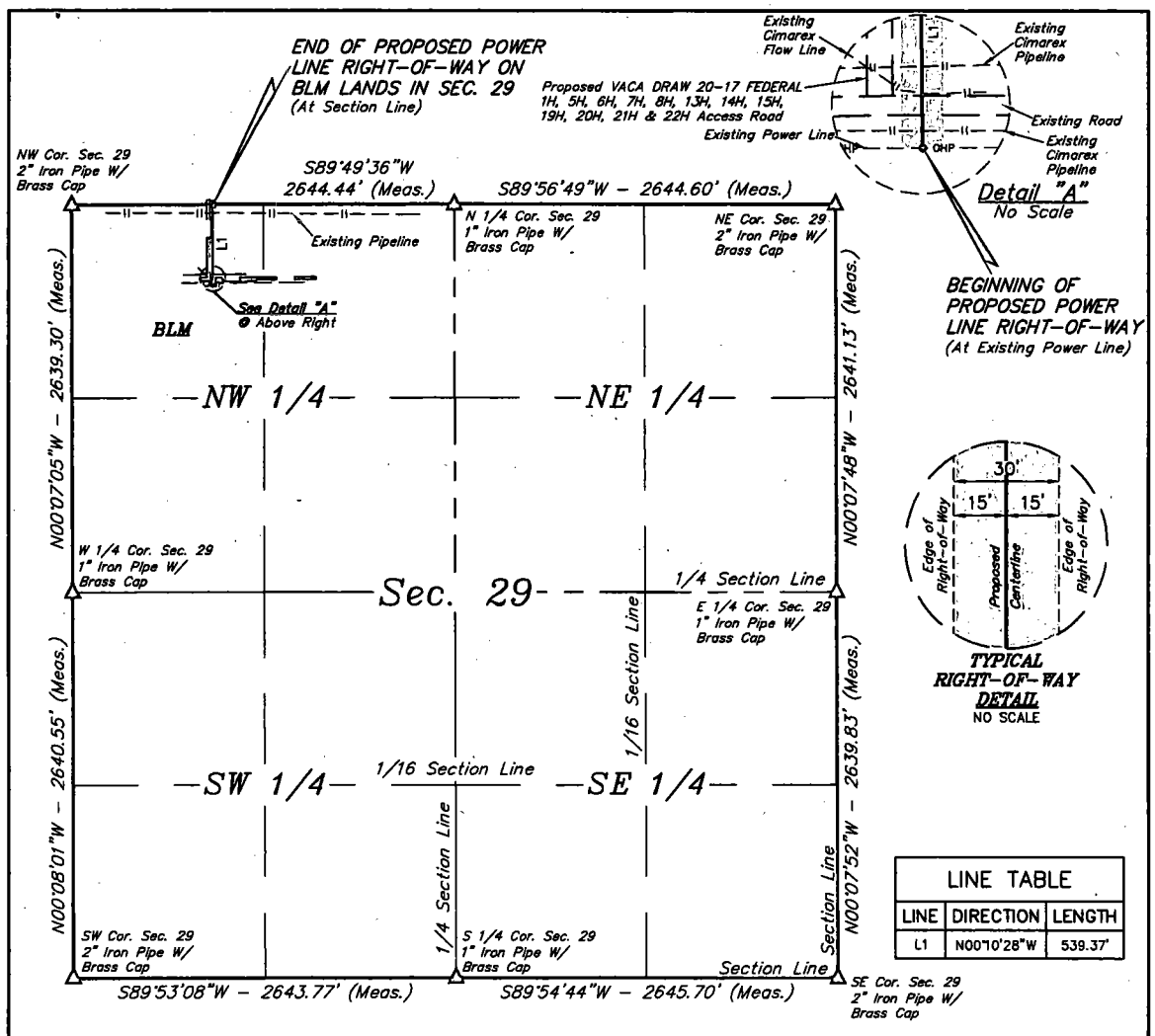
N

1000' 500' 0' 1000'

CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTIONS 20 & 29, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	1" = 1000'
OVERALL POWERLINE R-O-W			Exhibit H



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N00°10'28"W	539.37'

POWER LINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS IN SEC. 29

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE NW 1/4 NW 1/4 OF SECTION 29, T25S, R33E, N.M.P.M., WHICH BEARS S61°13'52"E 1114.58' FROM THE NORTHWEST CORNER OF SAID SECTION 29, THENCE N00°10'28"W 539.37' TO A POINT ON THE NORTH LINE OF NW 1/4 NW 1/4 OF SAID SECTION 29, WHICH BEARS N89°49'36"E 975.36' FROM THE NORTHWEST CORNER OF SAID SECTION 29. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.371 ACRES MORE OR LESS.

BEGINNING OF POWER LINE BEARS S61°13'52"E 1114.58' FROM THE NORTHWEST CORNER OF SECTION 29, T25S, R33E, N.M.P.M.

END OF POWER LINE ON BLM LANDS IN SEC. 29 BEARS N89°49'36"E 975.36' FROM THE NORTHWEST CORNER OF SECTION 29, T25S, R33E, N.M.P.M.

1000' 500' 0' 1000'

ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
SEC. 29 (NW 1/4)	BLM	539.37	32.69	0.371

Δ = SECTION CORNERS LOCATED.

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO
23782
PROFESSIONAL SURVEYOR
02-04-17

FILE: 61385-A1

Sheet 1 of 2

NOTES:
- Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

N

CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTION 29, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-23-17	SCALE
DRAWN BY	B.D.H.	02-04-17	1" = 1000'

POWER LINE R-O-W Exhibit H

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
SECTION CORNER	DESCRIPTION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 29, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.79"	W 103°36'10.25"
N 1/4 COR. SEC. 29, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'31.80"	W 103°35'39.51"
NE COR. SEC. 29, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.76"	W 103°35'08.77"
E 1/4 COR. SEC. 29, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'05.62"	W 103°35'08.79"
W 1/4 COR. SEC. 29, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'05.68"	W 103°36'10.27"
SW COR. SEC. 29, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°05'39.55"	W 103°36'10.28"
S 1/4 COR. SEC. 29, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°05'39.54"	W 103°35'39.55"
SE COR. SEC. 29, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°05'39.51"	W 103°35'08.80"

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°06'26.46"	W 103°35'58.91"
END	5+39.37	N 32°06'31.80"	W 103°35'58.92"

CERTIFICATE

THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO
23782
PROFESSIONAL SURVEYOR
02-04-17

FILE: 61385-A2

Sheet 2 of 2

NOTES:

CIMAREX ENERGY CO.

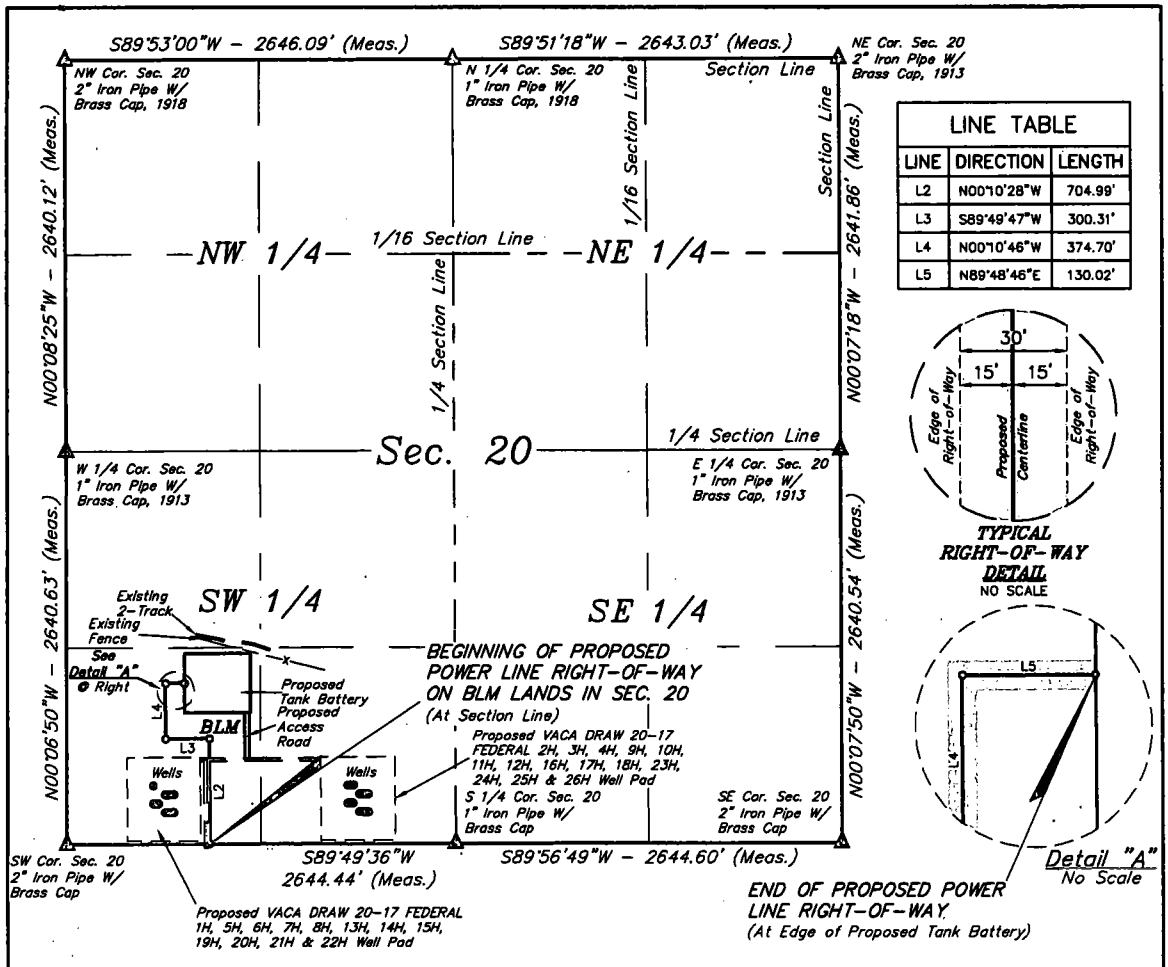
VACA DRAW 20-17 FEDERAL BATTERY
SECTION 29, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-23-17	SCALE
DRAWN BY	B.D.H.	02-04-17	N/A

POWER LINE R-O-W Exhibit H

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



LINE TABLE		
LINE	DIRECTION	LENGTH
L2	N00°10'28"W	704.99'
L3	S89°49'47"W	300.31'
L4	N00°10'46"W	374.70'
L5	N89°48'46"E	130.02'

TYPICAL RIGHT-OF-WAY DETAIL
NO SCALE

Detail "A"
No Scale

POWER LINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS IN SEC. 20

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT ON THE SOUTH LINE OF SW 1/4 SW 1/4 OF SECTION 20, T25S, R33E, N.M.P.M., WHICH BEARS N89°49'36"E 975.36' FROM THE SOUTHWEST CORNER OF SAID SECTION 20, THENCE N00°10'28"W 704.99'; THENCE S89°49'47"W 300.31'; THENCE N00°10'46"W 374.70'; THENCE N89°48'46"E 130.02' TO A POINT IN THE SW 1/4 SW 1/4 OF SAID SECTION 20, WHICH BEARS N36°32'03"E 1346.81' FROM THE SOUTHWEST CORNER OF SAID SECTION 20. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 1.040 ACRES MORE OR LESS.

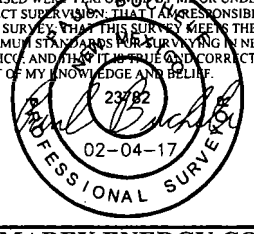
BEGINNING OF POWER LINE ON BLM LANDS IN SEC. 20 BEARS N89°49'36"E 975.36' FROM THE SOUTHWEST CORNER OF SECTION 20, T25S, R33E, N.M.P.M.

END OF POWER LINE BEARS N36°32'03"E 1346.81' FROM THE SOUTHWEST CORNER OF SECTION 20, T25S, R33E, N.M.P.M.

ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
SEC. 20 (SW 1/4)	BLM	1510.02	91.52	1.040

Δ = SECTION CORNERS LOCATED.

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61385-B1

Sheet 1 of 2

NOTES:
• Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

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CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTION 20, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-23-17	SCALE
DRAWN BY	B.D.H.	02-04-17	1" = 1000'
POWER LINE R-O-W			Exhibit H

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
SECTION CORNER	DESCRIPTION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP, 1918	N 32°07'24.04"	W 103°36'10.23"
N 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1918	N 32°07'24.02"	W 103°35'39.47"
NE COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP, 1913	N 32°07'24.02"	W 103°35'08.74"
E 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°06'57.88"	W 103°35'08.76"
W 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°06'57.92"	W 103°36'10.23"
SW COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.79"	W 103°36'10.25"
S 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'31.80"	W 103°35'39.51"
SE COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.76"	W 103°35'08.77"

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	5+39.37	N 32°06'31.80"	W 103°35'58.92"
1	12+44.36	N 32°06'38.77"	W 103°35'58.92"
2	15+44.67	N 32°06'38.77"	W 103°36'02.41"
3	19+19.37	N 32°06'42.48"	W 103°36'02.41"
END	20+49.39	N 32°06'42.48"	W 103°36'00.90"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO
23782
02-04-17
PROFESSIONAL SURVEYOR

FILE: 61385-B2

NOTES:

CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTION 20, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	C.J., D.J.	01-23-17	SCALE
DRAWN BY	B.D.H.	02-04-17	N/A

POWER LINE R-O-W Exhibit H

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
SECTION CORNER	DESCRIPTION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP, 1918	N 32°07'24.04"	W 103°36'10.23"
N 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1918	N 32°07'24.02"	W 103°35'39.47"
NE COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP, 1913	N 32°07'24.02"	W 103°35'08.74"
E 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°06'57.88"	W 103°35'08.76"
W 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP, 1913	N 32°06'57.92"	W 103°36'10.23"
SW COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.79"	W 103°36'10.25"
S 1/4 COR. SEC. 20, T25S, R33E	1" IRON PIPE W/ BRASS CAP	N 32°06'31.80"	W 103°35'39.51"
SE COR. SEC. 20, T25S, R33E	2" IRON PIPE W/ BRASS CAP	N 32°06'31.76"	W 103°35'08.77"

CIMAREX ENERGY CO.-VACA DRAW 20-17 FEDERAL TANK BATTERY			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°06'37.39"	W 103°35'55.96"
END	3+14.74	N 32°06'40.50"	W 103°35'55.96"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO
23782
02-04-17
PROFESSIONAL SURVEYOR

FILE: 61384-B

Sheet 2 of 2

NOTES:

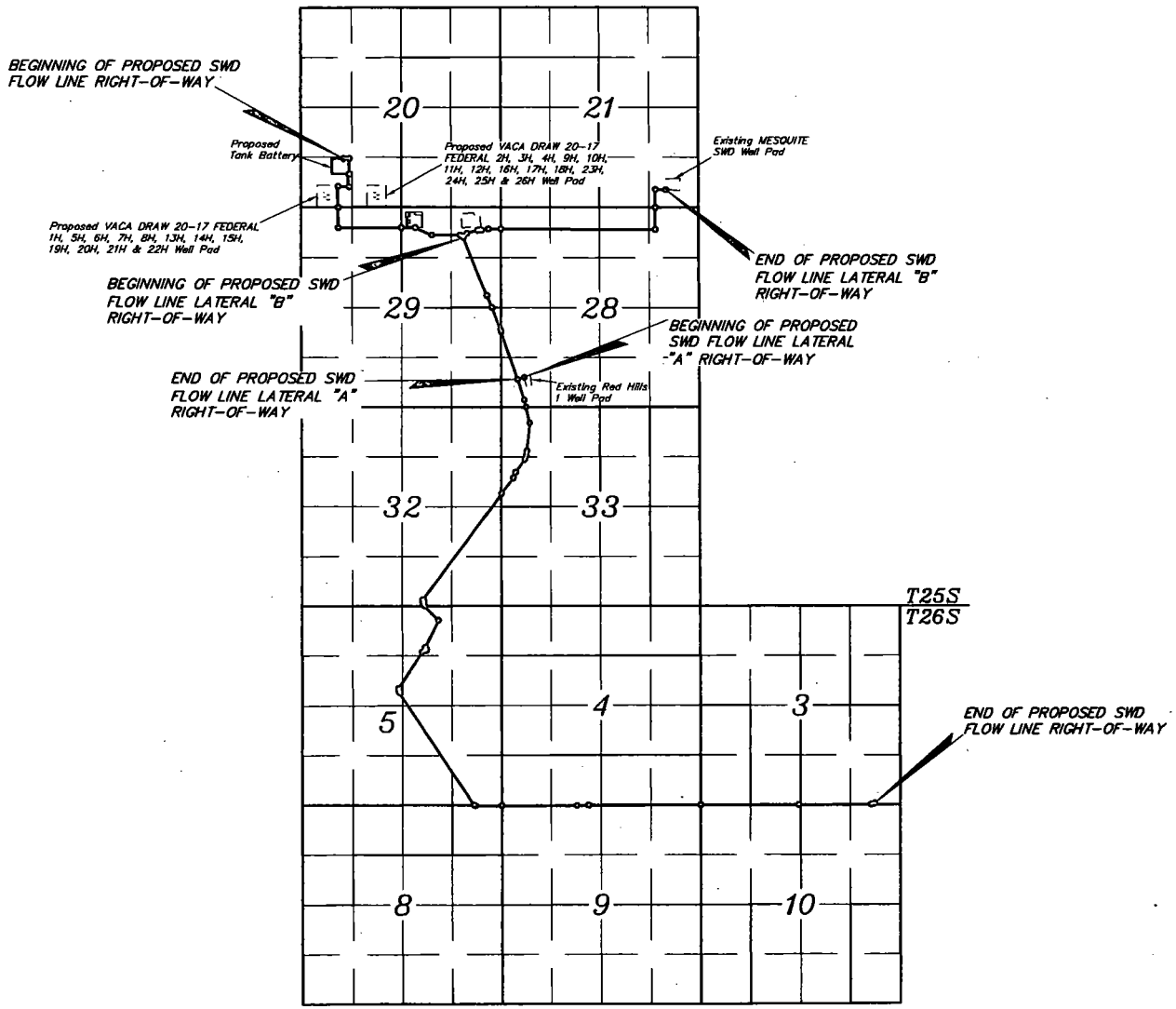
CIMAREX ENERGY CO.

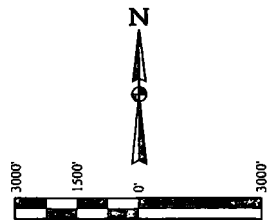
VACA DRAW 20-17 FEDERAL BATTERY
SECTION 20, T25S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-23-17	SCALE
DRAWN BY	B.D.H.	02-04-17	N/A

ACCESS ROAD R-O-W Exhibit P-2

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017





LEGEND:

- PROPOSED CENTERLINE
- SECTION LINE
- 1/4 SECTION LINE
- 1/16 SECTION LINE

REV: 1 04-03-17 S.F. (COMBINED OPTIONAL SWD ROUTES)

CIMAREX ENERGY CO.

VACA DRAW 20-17 FEDERAL BATTERY
SECTIONS 20, 21, 28, 29, 32 & 33, T25S, R33E, N.M.P.M.
SECTIONS 3, 4, 5, 8, 9 & 10, T26S, R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SURVEYED BY	C.J., D.J.	01-24-17	SCALE
DRAWN BY	B.D.H.	02-04-17	1" = 3000'

OVERALL SWD FLOW LINE MAP

Hydrogen Sulfide Drilling Operations Plan
Vaca Draw 20-17 Federal 10H
Cimarex Energy Co.
UL: N, Sec. 20-25S-33E
Lea Co., NM

1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:

A. Characteristics of H_2S
B. Physical effects and hazards
C. Principal and operation of H2S detectors, warning system and briefing areas.
D. Evacuation procedure, routes and first aid.
E. Proper use of safety equipment & life support systems
F. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.

H_2S Detection and Alarm Systems:

A. H2S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may play placed as deemed necessary.

B. An audio alarm system will be installed on the derrick floor and in the top doghouse.

3 Windsock and/or wind streamers:

A. Windsock at mudpit area should be high enough to be visible.

B. Windsock on the rig floor and / or top doghouse should be high enough to be visible.

4 Condition Flags and Signs

A. Warning sign on access road to location.
B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H_2S present in dangerous concentration). Only H2S trained and certified personnel admitted to location.

5 Well control equipment:

A. See exhibit "E-1"

6 Communication:

A. While working under masks chalkboards will be used for communication.
B. Hand signals will be used where chalk board is inappropriate.
C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drillstem Testing:
No DSTs r cores are planned at this time.

8 Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.

9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

H_2S Contingency Plan
Vaca Draw 20-17 Federal 10H
Cimarex Energy Co.
UL: N, Sec. 20-25S-33E
Lea Co., NM

Emergency Procedures

In the event of a release of gas containing H_2S, the first responder(s) must:

« Isolate the area and prevent entry by other persons into the 100 ppm ROE.
« Evacuate any public places encompassed by the 100 ppm ROE.
« Be equipped with H_2S monitors and air packs in order to control the release.
« Use the "buddy system" to ensure no injuries occur during the 432-620-1975
« Take precautions to avoid personal injury during this operation.
« Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
« Have received training in the:
  - Detection of H_2S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

Characteristics of H_2S and SO_2

Please see attached International Chemical Safety Cards.

Contacting Authorities

Cimarex Energy Co. of Colorado's personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Cimarex Energy Co. of Colorado's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

H_2S Contingency Plan Emergency Contacts

Vaca Draw 20-17 Federal 10H

Cimarex Energy Co.

UL: N, Sec. 20-25S-33E

Lea Co., NM

Company Office			
Cimarex Energy Co. of Colorado		800-969-4789	
Co. Office and After-Hours Menu			
Key Personnel			
Name	**Title**	**Office**	**Mobile**
Larry Seigrist	Drilling Manager	432-620-1934	580-243-8485
Charlie Pritchard	Drilling Superintendent	432-620-1975	432-238-7084
Roy Shirley	Construction Superintendent		432-634-2136

Artesia	
Ambulance	911
State Police	575-746-2703
City Police	575-746-2703
Sheriff's Office	575-746-9888
Fire Department	**575-746-2701**
Local Emergency Planning Committee	575-746-2122
New Mexico Oil Conservation Division	575-748-1283

Carlsbad	
Ambulance	911
State Police	575-885-3137
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	**575-887-3798**
Local Emergency Planning Committee	575-887-6544
US Bureau of Land Management	575-887-6544

Santa Fe	
New Mexico Emergency Response Commission (Santa Fe)	505-476-9600
New Mexico Emergency Response Commission (Santa Fe) 24 Hrs	505-827-9126
New Mexico State Emergency Operations Center	505-476-9635

National	
National Emergency Response Center (Washington, D.C.)	800-424-8802

Medical	
Flight for Life - 4000 24th St.; Lubbock, TX	806-743-9911
Aerocare - R3, Box 49F; Lubbock, TX	806-747-8923
Med Flight Air Amb - 2301 Yale Blvd S.E., #D3; Albuquerque, NM	505-842-4433
SB Air Med Service - 2505 Clark Carr Loop S.E.; Albuquerque, NM	505-842-4949

Other			
Boots & Coots IWC	800-256-9688	or	281-931-8884
Cudd Pressure Control	432-699-0139	or	432-563-3356
Halliburton	575-746-2757		
B.J. Services	575-746-3569		

Schlumberger

Cimarex Vaca Draw 20-17 Federal #10H Rev0 RM 1May17 Proposal
Geodetic Report
(Non-Def Plan)

CIMAREX

Report Date:	May 02, 2017 - 10:54 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	Cimarex	**Vertical Section Azimuth:**	359.630 ° (Grid North)
Field:	NM Lea County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Cimarex Vaca Draw 20-17 Federal #10H / Cimarex Vaca Draw 20-17 Federal #10H	**TVD Reference Datum:**	RKB
Well:	Cimarex Vaca Draw 20-17 Federal #10H	**TVD Reference Elevation:**	3441.100 ft above MSL
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3417.100 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.849 °
Survey Name:	Cimarex Vaca Draw 20-17 Federal #10H Rev0 RM 1May17	**Total Gravity Field Strength:**	998.4304mgn (9.80665 Based)
Survey Date:	May 01, 2017	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	115.104 ° / 9994.830 ft / 6.313 / 0.808	**Total Magnetic Field Strength:**	48011.515 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.837 °
Location Lat / Long:	N 32° 6' 35.06593", W 103° 35' 46.88514"	**Declination Date:**	May 01, 2017
Location Grid N/E Y/X:	N 404440.060 ftUS, E 769521.610 ftUS	**Magnetic Declination Model:**	HDGM 2016
CRS Grid Convergence Angle:	0.3918 °	**North Reference:**	Grid North
Grid Scale Factor:	0.99996873	**Grid Convergence Used:**	0.3918 °
Version / Patch:	2.10.254.0	**Total Corr Mag North->Grid North:**	6.4572 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL [330' FSL, 2010' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	100.00	0.00	37.30	100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	200.00	0.00	37.30	200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	300.00	0.00	37.30	300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	400.00	0.00	37.30	400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	500.00	0.00	37.30	500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	600.00	0.00	37.30	600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	700.00	0.00	37.30	700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	800.00	0.00	37.30	800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	900.00	0.00	37.30	900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1000.00	0.00	37.30	1000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1100.00	0.00	37.30	1100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1200.00	0.00	37.30	1200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1300.00	0.00	37.30	1300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1400.00	0.00	37.30	1400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1500.00	0.00	37.30	1500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1600.00	0.00	37.30	1600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1700.00	0.00	37.30	1700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1800.00	0.00	37.30	1800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	1900.00	0.00	37.30	1900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	2000.00	0.00	37.30	2000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	2100.00	0.00	37.30	2100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	2200.00	0.00	37.30	2200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	2300.00	0.00	37.30	2300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	2400.00	0.00	37.30	2400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	2500.00	0.00	37.30	2500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	2600.00	0.00	37.30	2600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	2700.00	0.00	37.30	2700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	2800.00	0.00	37.30	2800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	2900.00	0.00	37.30	2900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3000.00	0.00	37.30	3000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3100.00	0.00	37.30	3100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3200.00	0.00	37.30	3200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3300.00	0.00	37.30	3300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3400.00	0.00	37.30	3400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3500.00	0.00	37.30	3500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3600.00	0.00	37.30	3600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3700.00	0.00	37.30	3700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3800.00	0.00	37.30	3800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	3900.00	0.00	37.30	3900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4000.00	0.00	37.30	4000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4100.00	0.00	37.30	4100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4200.00	0.00	37.30	4200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4300.00	0.00	37.30	4300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4400.00	0.00	37.30	4400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4500.00	0.00	37.30	4500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4600.00	0.00	37.30	4600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4700.00	0.00	37.30	4700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4800.00	0.00	37.30	4800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	4900.00	0.00	37.30	4900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5000.00	0.00	37.30	5000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5100.00	0.00	37.30	5100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5200.00	0.00	37.30	5200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5300.00	0.00	37.30	5300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5400.00	0.00	37.30	5400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5500.00	0.00	37.30	5500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5600.00	0.00	37.30	5600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5700.00	0.00	37.30	5700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5800.00	0.00	37.30	5800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	5900.00	0.00	37.30	5900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6000.00	0.00	37.30	6000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6100.00	0.00	37.30	6100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6200.00	0.00	37.30	6200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6300.00	0.00	37.30	6300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6400.00	0.00	37.30	6400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6500.00	0.00	37.30	6500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6600.00	0.00	37.30	6600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6700.00	0.00	37.30	6700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6800.00	0.00	37.30	6800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	6900.00	0.00	37.30	6900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7000.00	0.00	37.30	7000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7100.00	0.00	37.30	7100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7200.00	0.00	37.30	7200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7300.00	0.00	37.30	7300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7400.00	0.00	37.30	7400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7500.00	0.00	37.30	7500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7600.00	0.00	37.30	7600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7700.00	0.00	37.30	7700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7800.00	0.00	37.30	7800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	7900.00	0.00	37.30	7900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	8000.00	0.00	37.30	8000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	8100.00	0.00	37.30	8100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	8200.00	0.00	37.30	8200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	8300.00	0.00	37.30	8300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	8400.00	0.00	37.30	8400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	8500.00	0.00	37.30	8500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	8600.00	0.00	37.30	8600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	8700.00	0.00	37.30	8700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	8800.00	0.00	37.30	8800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	8900.00	0.00	37.30	8900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9000.00	0.00	37.30	9000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9100.00	0.00	37.30	9100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9200.00	0.00	37.30	9200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9300.00	0.00	37.30	9300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9400.00	0.00	37.30	9400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9500.00	0.00	37.30	9500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9600.00	0.00	37.30	9600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9700.00	0.00	37.30	9700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9800.00	0.00	37.30	9800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	9900.00	0.00	37.30	9900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10000.00	0.00	37.30	10000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10100.00	0.00	37.30	10100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10200.00	0.00	37.30	10200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10300.00	0.00	37.30	10300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10400.00	0.00	37.30	10400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10500.00	0.00	37.30	10500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10600.00	0.00	37.30	10600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10700.00	0.00	37.30	10700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10800.00	0.00	37.30	10800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	10900.00	0.00	37.30	10900.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11000.00	0.00	37.30	11000.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11100.00	0.00	37.30	11100.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11200.00	0.00	37.30	11200.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11300.00	0.00	37.30	11300.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11400.00	0.00	37.30	11400.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11500.00	0.00	37.30	11500.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11600.00	0.00	37.30	11600.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11700.00	0.00	37.30	11700.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11800.00	0.00	37.30	11800.00	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
KOP - Build 12°/100' DLS	11854.51	0.00	37.30	11854.51	0.00	0.00	0.00	0.00	404440.06	769521.61	N 32 6 35.07	W 103 35 46.89
	11900.00	5.46	37.30	11899.93	1.71	1.72	1.31	12.00	404441.78	769522.92	N 32 6 35.08	W 103 35 46.87
	12000.00	17.46	37.30	11997.76	17.41	17.50	13.33	12.00	404457.56	769534.94	N 32 6 35.24	W 103 35 46.73
	12100.00	29.46	37.30	12089.33	48.86	49.11	37.41	12.00	404489.16	769559.02	N 32 6 35.55	W 103 35 46.45
	12200.00	41.46	37.30	12170.63	94.70	95.17	72.50	12.00	404535.23	769594.11	N 32 6 36.00	W 103 35 46.03
Wolfcamp	*12235.02*	*45.66*	*37.30*	*12196.00*	*113.79*	*114.36*	*87.12*	*12.00*	*404554.42*	*769608.73*	*N 32 6 36.19*	*W 103 35 45.86*
	12300.00	53.46	37.30	12238.12	152.91	153.67	117.07	12.00	404593.73	769638.67	N 32 6 36.58	W 103 35 45.51
	12400.00	65.46	37.30	12288.84	220.96	222.06	169.16	12.00	404662.11	769690.77	N 32 6 37.25	W 103 35 44.90
Build & Turn 4°/100' DLS	12479.51	75.00	37.30	12315.71	280.12	281.51	214.45	12.00	404721.56	769736.05	N 32 6 37.84	W 103 35 44.37
	12500.00	75.79	34.89	12320.87	296.06	297.53	226.13	12.00	404737.58	769747.73	N 32 6 37.99	W 103 35 44.23
	12600.00	79.96	23.38	12341.94	381.01	382.79	273.57	12.00	404822.84	769795.17	N 32 6 38.84	W 103 35 43.67
	12700.00	84.52	12.17	12355.48	475.00	476.98	303.72	12.00	404917.02	769825.32	N 32 6 39.77	W 103 35 43.32
	12800.00	89.28	1.14	12360.90	573.93	575.98	315.25	12.00	405016.02	769836.85	N 32 6 40.74	W 103 35 43.17
Landing Point	12813.71	89.94	359.63	12361.00	587.64	589.69	315.34	12.00	405029.73	769836.94	N 32 6 40.88	W 103 35 43.17
	12900.00	89.94	359.63	12361.09	673.93	675.97	314.79	0.00	405116.01	769836.39	N 32 6 41.73	W 103 35 43.17
	13000.00	89.94	359.63	12361.20	773.93	775.97	314.15	0.00	405216.01	769835.75	N 32 6 42.72	W 103 35 43.17
	13100.00	89.94	359.63	12361.31	873.93	875.97	313.51	0.00	405316.00	769835.11	N 32 6 43.71	W 103 35 43.17
	13200.00	89.94	359.63	12361.41	973.93	975.97	312.87	0.00	405415.99	769834.47	N 32 6 44.70	W 103 35 43.17
	13300.00	89.94	359.63	12361.52	1073.93	1075.96	312.22	0.00	405515.99	769833.82	N 32 6 45.69	W 103 35 43.17
	13400.00	89.94	359.63	12361.63	1173.93	1175.96	311.58	0.00	405615.98	769833.18	N 32 6 46.68	W 103 35 43.17
	13500.00	89.94	359.63	12361.74	1273.93	1275.96	310.94	0.00	405715.98	769832.54	N 32 6 47.67	W 103 35 43.17
	13600.00	89.94	359.63	12361.84	1373.93	1375.96	310.30	0.00	405815.97	769831.90	N 32 6 48.66	W 103 35 43.17
	13700.00	89.94	359.63	12361.95	1473.93	1475.96	309.66	0.00	405915.97	769831.26	N 32 6 49.65	W 103 35 43.17

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	13800.00	89.94	359.63	12362.06	1573.93	1575.95	309.02	0.00	406015.96	769830.62	N 32 6 50.64	W 103 35 43.17
	13900.00	89.94	359.63	12362.17	1673.93	1675.95	308.38	0.00	406115.96	769829.98	N 32 6 51.63	W 103 35 43.17
	14000.00	89.94	359.63	12362.27	1773.93	1775.95	307.74	0.00	406215.95	769829.34	N 32 6 52.62	W 103 35 43.17
	14100.00	89.94	359.63	12362.38	1873.93	1875.95	307.09	0.00	406315.95	769828.69	N 32 6 53.61	W 103 35 43.17
	14200.00	89.94	359.63	12362.49	1973.93	1975.95	306.45	0.00	406415.94	769828.05	N 32 6 54.60	W 103 35 43.17
	14300.00	89.94	359.63	12362.59	2073.93	2075.94	305.81	0.00	406515.93	769827.41	N 32 6 55.59	W 103 35 43.16
	14400.00	89.94	359.63	12362.70	2173.93	2175.94	305.17	0.00	406615.93	769826.77	N 32 6 56.58	W 103 35 43.16
	14500.00	89.94	359.63	12362.81	2273.93	2275.94	304.53	0.00	406715.92	769826.13	N 32 6 57.57	W 103 35 43.16
	14600.00	89.94	359.63	12362.92	2373.93	2375.94	303.89	0.00	406815.92	769825.49	N 32 6 58.56	W 103 35 43.16
	14700.00	89.94	359.63	12363.02	2473.93	2475.94	303.25	0.00	406915.91	769824.85	N 32 6 59.54	W 103 35 43.16
	14800.00	89.94	359.63	12363.13	2573.93	2575.93	302.60	0.00	407015.91	769824.20	N 32 7 0.53	W 103 35 43.16
	14900.00	89.94	359.63	12363.24	2673.93	2675.93	301.96	0.00	407115.90	769823.56	N 32 7 1.52	W 103 35 43.16
	15000.00	89.94	359.63	12363.35	2773.93	2775.93	301.32	0.00	407215.90	769822.92	N 32 7 2.51	W 103 35 43.16
	15100.00	89.94	359.63	12363.45	2873.93	2875.93	300.68	0.00	407315.89	769822.28	N 32 7 3.50	W 103 35 43.16
	15200.00	89.94	359.63	12363.56	2973.93	2975.92	300.04	0.00	407415.89	769821.64	N 32 7 4.49	W 103 35 43.16
	15300.00	89.94	359.63	12363.67	3073.93	3075.92	299.40	0.00	407515.88	769821.00	N 32 7 5.48	W 103 35 43.16
	15400.00	89.94	359.63	12363.78	3173.92	3175.92	298.76	0.00	407615.87	769820.36	N 32 7 6.47	W 103 35 43.16
	15500.00	89.94	359.63	12363.88	3273.92	3275.92	298.12	0.00	407715.87	769819.72	N 32 7 7.46	W 103 35 43.16
	15600.00	89.94	359.63	12363.99	3373.92	3375.92	297.47	0.00	407815.86	769819.07	N 32 7 8.45	W 103 35 43.16
	15700.00	89.94	359.63	12364.10	3473.92	3475.91	296.83	0.00	407915.86	769818.43	N 32 7 9.44	W 103 35 43.16
	15800.00	89.94	359.63	12364.21	3573.92	3575.91	296.19	0.00	408015.85	769817.79	N 32 7 10.43	W 103 35 43.16
	15900.00	89.94	359.63	12364.31	3673.92	3675.91	295.55	0.00	408115.85	769817.15	N 32 7 11.42	W 103 35 43.16
	16000.00	89.94	359.63	12364.42	3773.92	3775.91	294.91	0.00	408215.84	769816.51	N 32 7 12.41	W 103 35 43.16
	16100.00	89.94	359.63	12364.53	3873.92	3875.91	294.27	0.00	408315.84	769815.87	N 32 7 13.40	W 103 35 43.16
	16200.00	89.94	359.63	12364.64	3973.92	3975.90	293.63	0.00	408415.83	769815.23	N 32 7 14.39	W 103 35 43.15
	16300.00	89.94	359.63	12364.74	4073.92	4075.90	292.98	0.00	408515.83	769814.58	N 32 7 15.38	W 103 35 43.15
	16400.00	89.94	359.63	12364.85	4173.92	4175.90	292.34	0.00	408615.82	769813.94	N 32 7 16.37	W 103 35 43.15
	16500.00	89.94	359.63	12364.96	4273.92	4275.90	291.70	0.00	408715.81	769813.30	N 32 7 17.36	W 103 35 43.15
	16600.00	89.94	359.63	12365.07	4373.92	4375.90	291.06	0.00	408815.81	769812.66	N 32 7 18.35	W 103 35 43.15
	16700.00	89.94	359.63	12365.17	4473.92	4475.89	290.42	0.00	408915.80	769812.02	N 32 7 19.34	W 103 35 43.15
	16800.00	89.94	359.63	12365.28	4573.92	4575.89	289.78	0.00	409015.80	769811.38	N 32 7 20.33	W 103 35 43.15
	16900.00	89.94	359.63	12365.39	4673.92	4675.89	289.14	0.00	409115.79	769810.74	N 32 7 21.31	W 103 35 43.15
	17000.00	89.94	359.63	12365.50	4773.92	4775.89	288.49	0.00	409215.79	769810.10	N 32 7 22.30	W 103 35 43.15
	17100.00	89.94	359.63	12365.60	4873.92	4875.88	287.85	0.00	409315.78	769809.45	N 32 7 23.29	W 103 35 43.15
	17200.00	89.94	359.63	12365.71	4973.92	4975.88	287.21	0.00	409415.78	769808.81	N 32 7 24.28	W 103 35 43.15
	17300.00	89.94	359.63	12365.82	5073.92	5075.88	286.57	0.00	409515.77	769808.17	N 32 7 25.27	W 103 35 43.15
	17400.00	89.94	359.63	12365.92	5173.92	5175.88	285.93	0.00	409615.77	769807.53	N 32 7 26.26	W 103 35 43.15
	17500.00	89.94	359.63	12366.03	5273.92	5275.88	285.29	0.00	409715.76	769806.89	N 32 7 27.25	W 103 35 43.15
	17600.00	89.94	359.63	12366.14	5373.92	5375.87	284.65	0.00	409815.76	769806.25	N 32 7 28.24	W 103 35 43.15
	17700.00	89.94	359.63	12366.25	5473.92	5475.87	284.01	0.00	409915.75	769805.61	N 32 7 29.23	W 103 35 43.15
	17800.00	89.94	359.63	12366.35	5573.92	5575.87	283.36	0.00	410015.74	769804.96	N 32 7 30.22	W 103 35 43.15
	17900.00	89.94	359.63	12366.46	5673.92	5675.87	282.72	0.00	410115.74	769804.32	N 32 7 31.21	W 103 35 43.15
	18000.00	89.94	359.63	12366.57	5773.92	5775.87	282.08	0.00	410215.73	769803.68	N 32 7 32.20	W 103 35 43.15
	18100.00	89.94	359.63	12366.68	5873.92	5875.86	281.44	0.00	410315.73	769803.04	N 32 7 33.19	W 103 35 43.15
	18200.00	89.94	359.63	12366.78	5973.92	5975.86	280.80	0.00	410415.72	769802.40	N 32 7 34.18	W 103 35 43.14
	18300.00	89.94	359.63	12366.89	6073.92	6075.86	280.16	0.00	410515.72	769801.76	N 32 7 35.17	W 103 35 43.14
	18400.00	89.94	359.63	12367.00	6173.92	6175.86	279.52	0.00	410615.71	769801.12	N 32 7 36.16	W 103 35 43.14
	18500.00	89.94	359.63	12367.11	6273.92	6275.85	278.87	0.00	410715.71	769800.48	N 32 7 37.15	W 103 35 43.14
	18600.00	89.94	359.63	12367.21	6373.92	6375.85	278.23	0.00	410815.70	769799.83	N 32 7 38.14	W 103 35 43.14
	18700.00	89.94	359.63	12367.32	6473.92	6475.85	277.59	0.00	410915.70	769799.19	N 32 7 39.13	W 103 35 43.14
	18800.00	89.94	359.63	12367.43	6573.92	6575.85	276.95	0.00	411015.69	769798.55	N 32 7 40.12	W 103 35 43.14
	18900.00	89.94	359.63	12367.54	6673.92	6675.85	276.31	0.00	411115.68	769797.91	N 32 7 41.11	W 103 35 43.14
	19000.00	89.94	359.63	12367.64	6773.92	6775.84	275.67	0.00	411215.68	769797.27	N 32 7 42.09	W 103 35 43.14
	19100.00	89.94	359.63	12367.75	6873.92	6875.84	275.03	0.00	411315.67	769796.63	N 32 7 43.08	W 103 35 43.14
	19200.00	89.94	359.63	12367.86	6973.92	6975.84	274.38	0.00	411415.67	769795.99	N 32 7 44.07	W 103 35 43.14
	19300.00	89.94	359.63	12367.97	7073.92	7075.84	273.74	0.00	411515.66	769795.34	N 32 7 45.06	W 103 35 43.14
	19400.00	89.94	359.63	12368.07	7173.92	7175.84	273.10	0.00	411615.66	769794.70	N 32 7 46.05	W 103 35 43.14
	19500.00	89.94	359.63	12368.18	7273.92	7275.83	272.46	0.00	411715.65	769794.06	N 32 7 47.04	W 103 35 43.14
	19600.00	89.94	359.63	12368.29	7373.92	7375.83	271.82	0.00	411815.65	769793.42	N 32 7 48.03	W 103 35 43.14

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	19700.00	89.94	359.63	12368.40	7473.92	7475.83	271.18	0.00	411915.64	769792.78	N 32 7 49.02	W 103 35 43.14
	19800.00	89.94	359.63	12368.50	7573.92	7575.83	270.54	0.00	412015.64	769792.14	N 32 7 50.01	W 103 35 43.14
	19900.00	89.94	359.63	12368.61	7673.92	7675.83	269.90	0.00	412115.63	769791.50	N 32 7 51.00	W 103 35 43.14
	20000.00	89.94	359.63	12368.72	7773.92	7775.82	269.25	0.00	412215.62	769790.86	N 32 7 51.99	W 103 35 43.14
	20100.00	89.94	359.63	12368.83	7873.92	7875.82	268.61	0.00	412315.62	769790.21	N 32 7 52.98	W 103 35 43.14
	20200.00	89.94	359.63	12368.93	7973.92	7975.82	267.97	0.00	412415.61	769789.57	N 32 7 53.97	W 103 35 43.13
	20300.00	89.94	359.63	12369.04	8073.92	8075.82	267.33	0.00	412515.61	769788.93	N 32 7 54.96	W 103 35 43.13
	20400.00	89.94	359.63	12369.15	8173.92	8175.81	266.69	0.00	412615.60	769788.29	N 32 7 55.95	W 103 35 43.13
	20500.00	89.94	359.63	12369.25	8273.92	8275.81	266.05	0.00	412715.60	769787.65	N 32 7 56.94	W 103 35 43.13
	20600.00	89.94	359.63	12369.36	8373.92	8375.81	265.41	0.00	412815.59	769787.01	N 32 7 57.93	W 103 35 43.13
	20700.00	89.94	359.63	12369.47	8473.92	8475.81	264.76	0.00	412915.59	769786.37	N 32 7 58.92	W 103 35 43.13
	20800.00	89.94	359.63	12369.58	8573.92	8575.81	264.12	0.00	413015.58	769785.72	N 32 7 59.91	W 103 35 43.13
	20900.00	89.94	359.63	12369.68	8673.92	8675.80	263.48	0.00	413115.58	769785.08	N 32 8 0.90	W 103 35 43.13
	21000.00	89.94	359.63	12369.79	8773.92	8775.80	262.84	0.00	413215.57	769784.44	N 32 8 1.89	W 103 35 43.13
	21100.00	89.94	359.63	12369.90	8873.92	8875.80	262.20	0.00	413315.56	769783.80	N 32 8 2.87	W 103 35 43.13
	21200.00	89.94	359.63	12370.01	8973.92	8975.80	261.56	0.00	413415.56	769783.16	N 32 8 3.86	W 103 35 43.13
	21300.00	89.94	359.63	12370.11	9073.92	9075.80	260.92	0.00	413515.55	769782.52	N 32 8 4.85	W 103 35 43.13
	21400.00	89.94	359.63	12370.22	9173.92	9175.79	260.28	0.00	413615.55	769781.88	N 32 8 5.84	W 103 35 43.13
	21500.00	89.94	359.63	12370.33	9273.92	9275.79	259.63	0.00	413715.54	769781.24	N 32 8 6.83	W 103 35 43.13
	21600.00	89.94	359.63	12370.44	9373.92	9375.79	258.99	0.00	413815.54	769780.59	N 32 8 7.82	W 103 35 43.13
	21700.00	89.94	359.63	12370.54	9473.92	9475.79	258.35	0.00	413915.53	769779.95	N 32 8 8.81	W 103 35 43.13
	21800.00	89.94	359.63	12370.65	9573.92	9575.79	257.71	0.00	414015.53	769779.31	N 32 8 9.80	W 103 35 43.13
	21900.00	89.94	359.63	12370.76	9673.92	9675.78	257.07	0.00	414115.52	769778.67	N 32 8 10.79	W 103 35 43.13
	22000.00	89.94	359.63	12370.87	9773.92	9775.78	256.43	0.00	414215.52	769778.03	N 32 8 11.78	W 103 35 43.13
	22100.00	89.94	359.63	12370.97	9873.92	9875.78	255.79	0.00	414315.51	769777.39	N 32 8 12.77	W 103 35 43.12
Cimarex Vaca Draw 20-17 Federal #10H - PBHL [330' FNL, 2330' FWL]	22124.51	89.94	359.63	12371.00	9898.43	9900.29	255.63	0.00	414340.02	769777.23	N 32 8 13.01	W 103 35 43.12

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	24.000	1/100.000	30.000	30.000		NAL_MWD_PLUS_0.5_DEG-Depth Only	Original Borehole / Cimarex Vaca Draw 20-17 Federal #10H Rev0 RM 1May17
	1	24.000	22124.511	1/100.000	30.000	30.000		NAL_MWD_PLUS_0.5_DEG	Original Borehole / Cimarex Vaca Draw 20-17 Federal #10H Rev0

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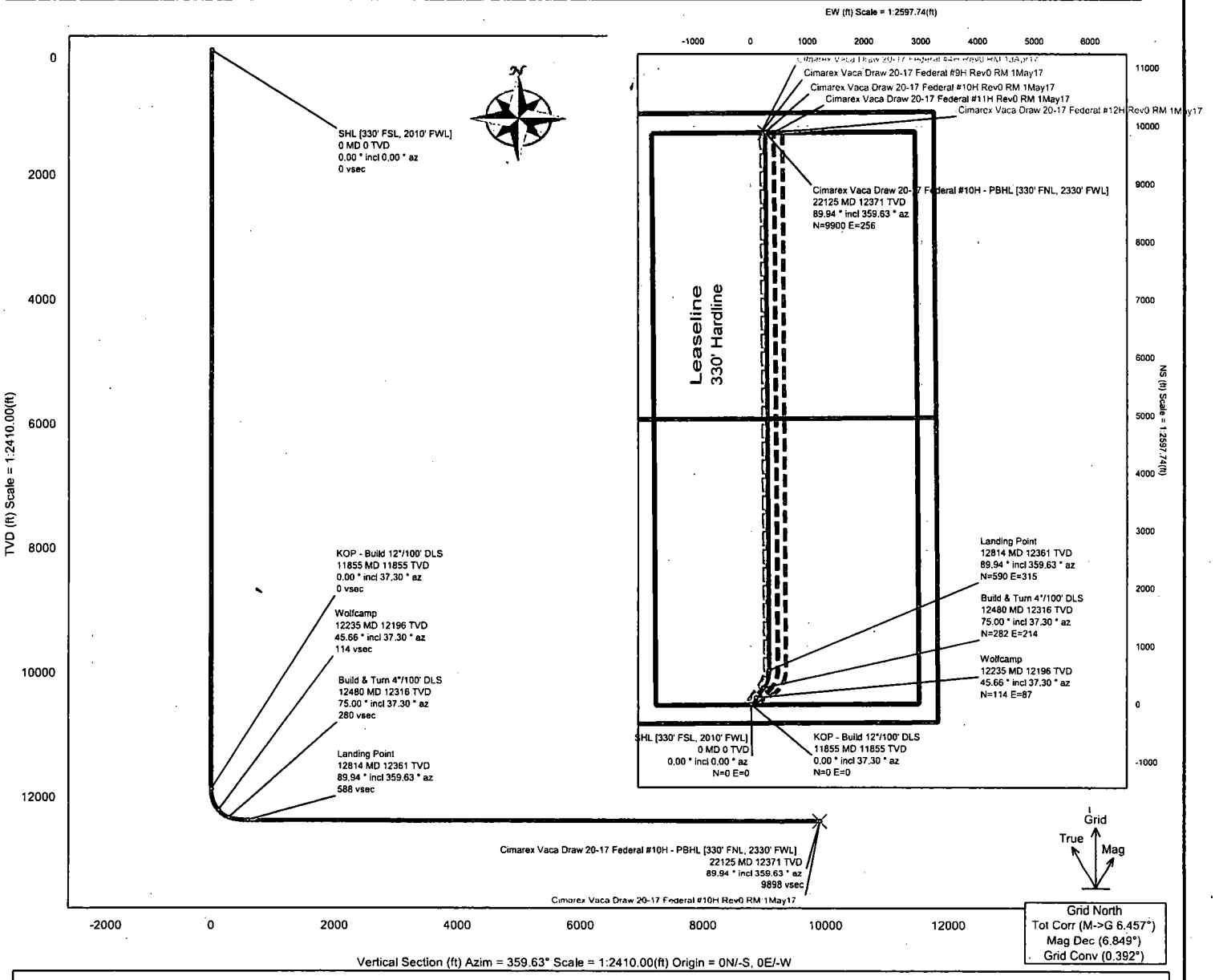
Cimarex Rev 0

CIMAREX

Borehole:	Well:	Field:	Structure:
Original Borehole	Cimarex Vaca Draw 20-17 Federal #10H	NM Lea County (NAD 83)	Cimarex Vaca Draw 20-17 Federal #10H

Gravity & Magnetic Parameters					Surface Location	NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous			
Model:	HDGM 2016	Dip: 59.837°	Date:	01-May-2017	Lat:	N 32 6 35.07	Northing:	404440.06ftUS	Grid Conv: 0.3918°	Slot:	Cimarex Vaca Draw 20-17 Federal #10H	TVD Ref:	RKB(3441.1ft above MSL)
MagDec:	6.849°	FS: 48011.515nT	Gravity FS:	998.43mgn (9.80665 Based)	Lon:	W 103 35 48.89	Easting:	769521.61ftUS	Scale Fact: 0.99996873	Plan:	Cimarex Vaca Draw 20-17 Federal #10H Rev0 RM 1May17		



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [330' FSL, 2010' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
KOP - Build 12°/100' DLS	11854.51	0.00	37.30	11854.51	0.00	0.00	0.00	0.00
Wolfcamp	12235.02	45.66	37.30	12196.00	113.79	114.36	87.12	12.00
Build & Turn 4°/100' DLS	12479.51	75.00	37.30	12315.71	280.12	281.51	214.45	12.00
Landing Point	12813.71	89.94	359.63	12361.00	587.64	589.69	315.34	12.00
Cimarex Vaca Draw 20-17 Federal #10H - PBHL [330' FNL, 2330' FWL]	22124.51	89.94	359.63	12371.00	9898.43	9900.29	255.63	0.00

Schlumberger

CIMAREX

Cimarex Vaca Draw 20-17 Federal #10H Rev0 RM 1May17 Anti-Collision Summary Report

Analysis Date-24hr Time:	May 03, 2017 - 14:15	**Analysis Method:**	3D Least Distance
Client:	Cimarex	**Reference Trajectory:**	Cimarex Vaca Draw 20-17 Federal #10H Rev0 RM 1May17 (Non-Def Plan)
Field:	NM Lea County (NAD 83)	**Depth Interval:**	Every 10.00 Measured Depth (ft)
Structure:	Cimarex Vaca Draw 20-17 Federal #10H	**Rule Set:**	NAL Procedure: D&M AntiCollision Standard S002
Slot:	Cimarex Vaca Draw 20-17 Federal #10H	**Min Pts:**	All local minima indicated.
Well:	Cimarex Vaca Draw 20-17 Federal #10H	**Version / Patch:**	2.10.453.0
Borehole:	Original Borehole	**Database \ Project:**	US1153APP452.dir.slb.com\drilling-NM Lea County 2.10
Scan MD Range:	0.00ft ~ 22124.51ft		

Trajectory Error Model: ISCWSA0 3-D 73.854% Confidence 2.0000 sigma, for subject well. For offset wells, error model version is specified with each well respectively.

Offset Trajectories Summary

Offset Selection Criteria

Wellhead distance scan: Not performed!

Selection filters: Definitive Surveys - Definitive Plans - Definitive surveys exclude definitive plans
- All Non-Def Surveys when no Def-Survey is set in a borehole - All Non-Def Plans when no Def-Plan is set in a borehole

Offset Trajectory	Separation			Allow	Sep.	Controlling	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)	Dev. (ft)	Fact.	Rule	MD (ft)	TVD (ft)	Alert	Minor	Major		
Cimarex Vaca Draw 20-17 Federal #9H Rev0 RM 1May17 (Non-Def Plan)													Fail Major
	19.99	16.49	17.48	3.50	1827.88	MAS = 5.03 (m)	0.00	0.00	CtCt<=15m<15.00			Enter Alert	
	19.99	16.49	12.90	3.50	3.81	MAS = 5.03 (m)	24.00	24.00				WRP	
	19.99	20.02	5.81	-0.03	1.50	OSF1.50	2660.00	2660.00		OSF<1.50		Enter Minor	
	19.99	28.79	-0.03	-8.80	1.00	OSF1.50	3960.00	3960.00			OSF<1.00	Enter Major	
	19.99	82.03	-35.53	-62.04	**0.33**	OSF1.50	11854.51	11854.51				MinPts	
	20.01	82.06	**-35.53**	**-62.05**	0.33	OSF1.50	11860.00	11860.00				MinPts	
	54.07	83.22	-2.24	-29.15	0.96	OSF1.50	12050.00	12044.58			OSF>1.00	Exit Major	
	80.55	83.56	24.01	-3.01	1.44	OSF1.50	12110.00	12097.98		OSF>1.50		Exit Minor	
	271.55	85.26	213.88	186.29	4.88	OSF1.50	12380.00	12280.16	OSF>5.00			Exit Alert	
	393.62	120.07	312.74	273.55	4.99	OSF1.50	14070.00	12362.35	OSF<5.00			Enter Alert	
	386.17	386.37	127.75	-0.21	1.50	OSF1.50	21140.00	12369.94		OSF<1.50		Enter Minor	
	385.13	426.11	**100.22**	**-40.98**	**1.35**	OSF1.50	22124.51	12371.00				MinPts	
Cimarex Vaca Draw 20-17 Federal #11H Rev0 RM 1May17 (Non-Def Plan)													Fail Major
	20.00	16.50	17.50	3.50	N/A	MAS = 5.03 (m)	0.00	0.00	CtCt<=15m<15.00			Enter Alert	
	20.00	16.50	12.92	3.50	3.82	MAS = 5.03 (m)	24.00	24.00				WRP	
	20.00	20.02	5.82	-0.02	1.50	OSF1.50	2660.00	2660.00		OSF<1.50		Enter Minor	
	20.00	28.79	-0.02	-8.79	1.00	OSF1.50	3960.00	3960.00			OSF<1.00	Enter Major	
	20.00	81.86	-35.41	-61.86	0.33	OSF1.50	11830.00	11830.00				MinPt-CtCt	
	20.00	81.93	**-35.45**	**-61.93**	**0.33**	OSF1.50	11840.00	11840.00				MinPts	
	56.78	84.27	-0.24	-27.49	1.00	OSF1.50	12270.00	12219.51			OSF>1.00	Exit Major	
	85.39	85.60	27.49	-0.21	1.50	OSF1.50	12430.00	12300.44		OSF>1.50		Exit Minor	
	150.36	150.57	49.15	-0.21	1.50	OSF1.50	15050.00	12363.40		OSF<1.50		Enter Minor	
	150.25	224.32	-0.13	-74.07	1.00	OSF1.50	17060.00	12365.56			OSF<1.00	Enter Major	
	149.98	425.47	**-134.50**	**-275.50**	**0.52**	OSF1.50	22124.51	12371.00				MinPts	

Offset Trajectory	Separation			Allow	Sep.	Controlling	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)	Dev. (ft)	Fact.	Rule	MD (ft)	TVD (ft)	Alert	Minor	Major		
Cimarex Vaca Draw 20-17 Federal #4H Rev0 RM 13Apr17 (Non-Def Plan)													Fail Major
	84.85	32.81	82.29	52.04	1434.30	MAS = 10.00 (m)	0.00	0.00				Surface	
	84.85	32.81	77.76	52.04	17.93	MAS = 10.00 (m)	24.00	24.00				WRP	
	84.85	32.81	65.86	52.04	4.99	MAS = 10.00 (m)	3730.00	3730.00	OSF<5.00			Enter Alert	
	84.85	82.06	29.31	2.79	1.55	OSF1.50	11860.00	11860.00				MinPt-CtCt	
	85.10	82.85	**29.04**	2.25	1.54	OSF1.50	12000.00	11997.76				MinPt-EOU	
	85.41	83.23	29.09	**2.18**	1.54	OSF1.50	12070.00	12062.76				MinPt-ADP	
	85.47	83.29	29.11	2.18	**1.54**	OSF1.50	12080.00	12071.71				MinPt-SF	
	87.31	87.56	28.10	-0.25	1.50	OSF1.50	12590.00	12340.16		OSF<1.50		Enter Minor	
	68.84	91.15	7.24	-22.31	1.12	OSF1.50	12880.00	12361.07				MinPt-CtCt	
	68.85	102.09	-0.04	-33.24	1.00	OSF1.50	13460.00	12361.69			OSF<1.00	Enter Major	
	68.99	424.39	**-214.77**	**-355.40**	**0.24**	OSF1.50	22124.51	12371.00				MinPts	

1. Geological Formations

TVD of target 12,371
MD at TD 22,125

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	984	N/A	
Salado	1128	N/A	
Castille	4687	N/A	
Bell Canyon	4956	N/A	
Cherry Canyon	5974	Hydrocarbons	
Brushy Canyon	7484	Hydrocarbons	
Bone Spring	9040	Hydrocarbons	
2nd Bone Spring Sand	10573	Hydrocarbons	
3rd Bone Spring Sand	11726	Hydrocarbons	
Wolfcamp	12196	Hydrocarbons	
Wolfcamp A1 Shale	12361	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	1034	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.56	3.66	6.49
12 1/4	0	4936	9-5/8"	40.00	J-55	LT&C	1.18	1.51	2.63
8 3/4	0	11855	7"	29.00	L-80	LT&C	1.27	1.47	1.64
8 3/4	11855	12813	7"	29.00	L-80	BT&C	1.21	1.41	45.18
6	11855	22125	4-1/2"	13.50	P-110	BT&C	1.38	1.61	60.58
				BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	N
Is 2nd string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	N

3. Cementing Program

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	501	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	134	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	936	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	289	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	216	9.20	6.18	28.80		Lead: Class C + Extender + Salt + Strength Enhancement + LCM + Fluid Loss + Retarder
	123	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS
Completion System	677	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	45
Intermediate	0	44
Production	4736	23
Completion System	12813	10

4. Pressure Control Equipment

	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	13 5/8	2M	Annular	X	50% of working pressure
			Blind Ram		2M
			Pipe Ram		
			Double Ram	X	
			Other		
8 3/4	13 5/8	3M	Annular	X	50% of working pressure
			Blind Ram		3M
			Pipe Ram		
			Double Ram	X	
			Other		
6	13 5/8	5M	Annular	X	50% of working pressure
			Blind Ram		5M
			Pipe Ram		
			Double Ram	X	
			Other		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.	
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	N	Are anchors required by manufacturer?

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1034'	FW Spud Mud	8.30 - 8.80	28	N/C
1034' to 4936'	Brine Water	9.70 - 10.20	30-32	N/C
4936' to 12813'	FW/Cut Brine	8.50 - 9.00	30-32	N/C
12813' to 22125'	Oil Based Mud	11.50 - 12.00	50-70	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing	
X	Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test?
	Coring?

Additional Logs Planned	Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	5789 psi
Abnormal Temperature	No

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
X	H2S is present
X	H2S plan is attached

8. Other Facets of Operation