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Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM027279

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
PHOENIX 21/22 B2KI FED COM 1H
327305

2. Name of Operator
MEWBOURNE OIL COMPANY

9. API Well No.
30-015-46822

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory
PO Box 5270 Hobbs NM 88240	(575)393-5905	SANTO NINO / BONE SPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface NENE / 720 FNL / 270 FEL / LAT 32.7237856 / LONG -103.9864216

At proposed prod. zone NESE / 1980 FSL / 100 FEL / LAT 32.7311056 / LONG -103.951541

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 29 / T18S / R30E / NMP

14. Distance in miles and direction from nearest town or post office*	12. County or Parish	13. State
20 miles	EDDY	NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
185 feet	1751.53	320

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
330 feet	8339 feet / 18122 feet	FED: NM1693

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3415 feet	04/07/2019	60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

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

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Bradley Bishop / Ph: (575)393-5905	02/12/2019

Title
Regulatory

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	03/05/2020

Title	Office
Assistant Field Manager Lands & Minerals	CARLSBAD

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

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

APPROVED WITH CONDITIONS

Approval Date: 03/04/2020

(Continued on page 2)

*(Instructions on page 2)

RWP 3-11-20

INSTRUCTIONS

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

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

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

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

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

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

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.
ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.
EFFECT OE NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

(Continued on page 3)

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

1. Geologic Formations

TVD of target	8,339'	Pilot hole depth	NA
MD at TD:	18,122'	Deepest expected fresh water:	240'

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface		
Castile	470		
Top of Salt			
Base of Salt	1200		
Yates	1430		
Seven Rivers	1855		
Queen	2530		
Grayburg	2940		
San Andreas	3385		
Delaware	3735	Oil	
Manzanita Marker			
Brushy Canyon			
Bone Spring	4765	Oil/Gas	
1st Bone Spring Sand	7160		
2nd Bone Spring Sand	7815	Target Zone	
3rd Bone Spring Sand			
Abo			
Wolfcamp			
Devonian			
Fusselman			
Ellenburger			
Granite Wash			

*H2S, water flows, loss of circulation, abnormal pressures, etc.

Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
MEWBOURNE OIL COMPANY	PHOENIX 21/22 B2KI FED COM	1H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
L	21	18S	30E		1980	S	1019	W	EDDY

Latitude	Longitude	NAD
32.7311395	-103.9822304	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
K	21	18S	30E		1980	S	1417	W	EDDY

Latitude	Longitude	NAD
32.7311381	-103.9807688	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
I	22	18S	30E		1980	S	100	E	EDDY

Latitude	Longitude	NAD
32.7311075	-103.9515384	83

Is this well the defining well for the Horizontal Spacing Unit? [Y]

Is this well an infill well? [N]

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018

Additional Operator Remarks

Location of Well

1. SHL: NENE / 720 FNL / 270 FEL / TWSP: 18S / RANGE: 30E / SECTION: 29 / LAT: 32.7237856 / LONG: -103.9864216 (TVD: 0 feet, MD: 0 feet)
   PPP: SWSW / 0 FNL / 74 FWL / TWSP: 18S / RANGE: 30E / SECTION: 21 / LAT: 32.7257156 / LONG: -103.9853018 (TVD: 2845 feet, MD: 3010 feet)
   PPP: NWSE / 1980 FSL / 2640 FWL / TWSP: 18S / RANGE: 30E / SECTION: 21 / LAT: 32.7311345 / LONG: -103.9769622 (TVD: 8209 feet, MD: 10303 feet)
   PPP: NESW / 1980 FSL / 1320 FWL / TWSP: 18S / RANGE: 30E / SECTION: 22 / LAT: 32.7311215 / LONG: -103.9640909 (TVD: 8275 feet, MD: 14261 feet)
   PPP: NESE / 1980 FSL / 1320 FEL / TWSP: 18S / RANGE: 30E / SECTION: 22 / LAT: 32.7311121 / LONG: -103.9555058 (TVD: 8319 feet, MD: 16902 feet)
   BHL: NESE / 1980 FSL / 100 FEL / TWSP: 18S / RANGE: 30E / SECTION: 22 / LAT: 32.7311056 / LONG: -103.951541 (TVD: 8339 feet, MD: 18122 feet)

BLM Point of Contact

Name: Priscilla Perez
Title: Legal Instruments Examiner
Phone: 5752345934
Email: pperez@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
LEASE NO.:	NMNM027279
WELL NAME & NO.:	PHEONIX 21 22 B2KI FED COM 1H
SURFACE HOLE FOOTAGE:	720'/N & 270'/E
BOTTOM HOLE FOOTAGE	1980'/S & 100'/E
LOCATION:	SECTION 29, T18S, R30E
COUNTY:	LEA

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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.

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.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

Timing Limitation Exceptions:
The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

Hydrology
The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct

the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

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.

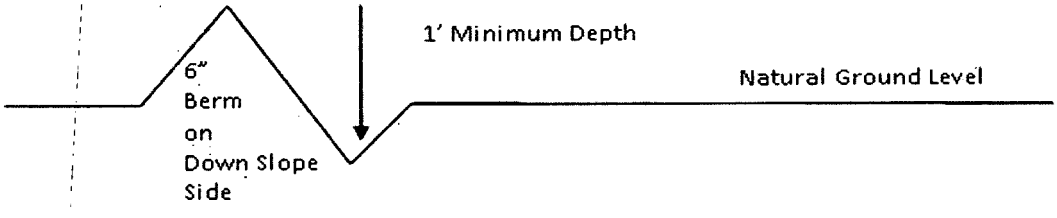
Ditching
Ditching shall be required on both sides of the road.

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

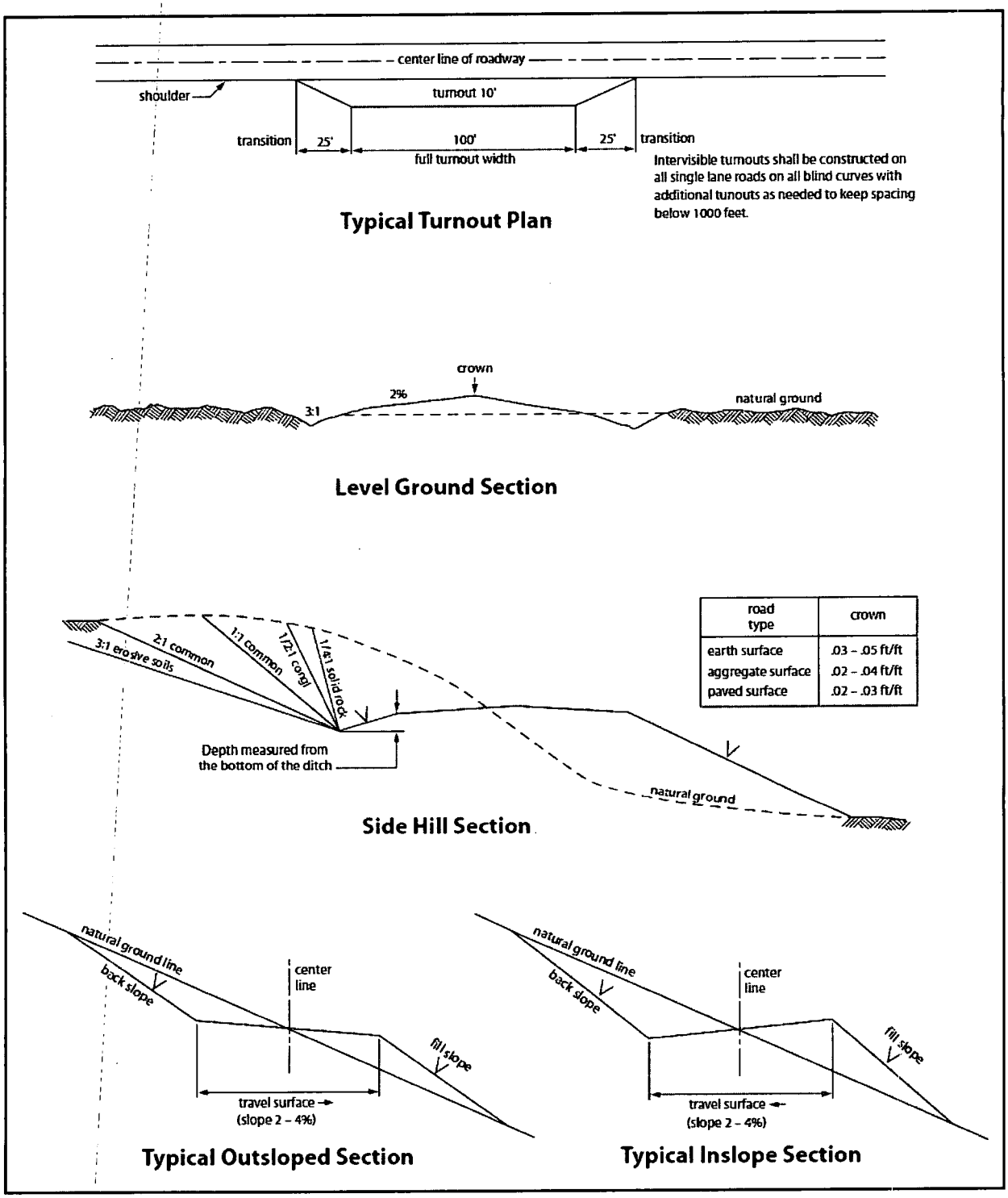


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VI. 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).

VII. 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).

VIII. 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).

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

IX. Potash Resources

Lessees must comply with the 2012 Secretarial Potash Order. The Order is designed to manage the efficient development of oil, gas, and potash resources. Section 6 of the Order provides general provisions which must be followed to minimize conflict between the industries and ensure the safety of operations. To minimize impacts to potash resources, the proposed well is confined within the boundaries of the established Phoenix Drill Island.

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

03/05/2020

Operator Certification

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

NAME: Bradley Bishop **Signed on:** 02/12/2019

Title: Regulatory

Street Address: PO Box 5270

City: Hobbs **State:** NM **Zip:** 88260

Phone: (575)393-5905

Email address: bbishop@mewbourne.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

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U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Application Data Report

03/05/2020

APD ID: 10400038941
Submission Date: 02/12/2019
Operator Name: MEWBOURNE OIL COMPANY
Well Name: PHOENIX 21/22 B2KI FED COM
Well Number: 1H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400038941
Tie to previous NOS?
Submission Date: 02/12/2019
BLM Office: CARLSBAD
User: Bradley Bishop
Title: Regulatory
Federal/Indian APD: FED
Is the first lease penetrated for production Federal or Indian? FED
Lease number: NMNM027279
Lease Acres: 1751.53
Surface access agreement in place?
Allotted?
Reservation:
Agreement in place? NO
Federal or Indian agreement:
Agreement number:
Agreement name:
Keep application confidential? YES
Permitting Agent? NO
APD Operator: MEWBOURNE OIL COMPANY
Operator letter of designation:

Operator Info

Operator Organization Name: MEWBOURNE OIL COMPANY
Operator Address: PO Box 5270
Zip: 88240
Operator PO Box:
Operator City: Hobbs
State: NM
Operator Phone: (575)393-5905
Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO
Master Development Plan name:
Well in Master SUPO? NO
Master SUPO name:
Well in Master Drilling Plan? NO
Master Drilling Plan name:
Well Name: PHOENIX 21/22 B2KI FED COM
Well Number: 1H
Well API Number:
Field/Pool or Exploratory? Field and Pool
Field Name: SANTO NINO
Pool Name: BONE SPRING
Is the proposed well in an area containing other mineral resources? USEABLE WATER,POTASH

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Is the proposed well in an area containing other mineral resources? USEABLE WATER,POTASH

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: SINGLE WELL **Multiple Well Pad Name:** **Number:**

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: APPRAISAL

Describe sub-type:

Distance to town: 20 Miles **Distance to nearest well:** 330 FT **Distance to lease line:** 185 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: Phoenix21_22B2K1FedCom1H_wellplat_20190207143926.pdf

Well work start Date: 04/07/2019 **Duration:** 60 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: **Reference Datum:**

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	720	FNL	270	FEL	18S	30E	29	Aliquot NENE	32.7237856	-103.9864216	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 027279	3415	0	0	
KOP Leg #1	1980	FSL	1019	FWL	18S	30E	21	Aliquot NWSW	32.7311395	-103.9822304	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 040117	-4298	8410	7713	
PPP Leg #1-1	1980	FSL	1320	FEL	18S	30E	22	Aliquot NESE	32.7311121	-103.9555058	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC0 058186	-4904	16902	8319	

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP Leg #1-2	1980	FSL	1320	FWL	18S	30E	22	Aliquot NESW	32.7311215	-103.9640909	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 027277	-4860	14261	8275	
PPP Leg #1-3	1980	FSL	2640	FWL	18S	30E	21	Aliquot NWSE	32.7311345	-103.9769622	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC0 028978A	-4794	10303	8209	
PPP Leg #1-4	0	FNL	74	FWL	18S	30E	21	Aliquot SWSW	32.7257156	-103.9853018	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 040117	570	30130	2845	
EXIT Leg #1	1980	FSL	100	FEL	18S	30E	22	Aliquot NESE	32.7311056	-103.9515541	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC0 058186	-4924	18122	8339	
BHL Leg #1	1980	FSL	100	FEL	18S	30E	22	Aliquot NESE	32.7311056	-103.9515541	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC0 058186	-4924	18122	8339	

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report

03/05/2020

APD ID: 10400038941 **Submission Date:** 02/12/2019

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

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Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
393581	UNKNOWN	3415	27	27		NONE	N
393588	CASTILE	2945	470	470	ANHYDRITE, DOLOMITE	USEABLE WATER	N
393589	TOP SALT	2902	515	515	SALT	NONE	N
393582	BASE OF SALT	2215	1200	1200	SALT	NONE	N
393583	YATES	1985	1430	1430	SANDSTONE	NATURAL GAS, OIL	N
393584	SEVEN RIVERS	1560	1855	1855	DOLOMITE	NATURAL GAS, OIL	N
393585	QUEEN	885	2530	2530	DOLOMITE, SANDSTONE	NATURAL GAS, OIL	N
393579	GRAYBURG	475	2940	2940		NATURAL GAS, OIL	N
393590	DELAWARE	-320	3735	3735	LIMESTONE	NATURAL GAS, OIL	N
393580	BONE SPRING	-1350	4765	4765	LIMESTONE, SHALE	NATURAL GAS, OIL	N
393586	BONE SPRING 1ST	-3745	7160	7160	SANDSTONE	NATURAL GAS, OIL	N
393587	BONE SPRING 2ND	-4400	7815	7815	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 18122

Equipment: Annular, Pipe Ram, Blind Ram

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. Anchors are not required by the manufacturer. A multibowl wellhead is being used. See attached schematic.
Testing Procedure: 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.

Choke Diagram Attachment:

Phoenix_21_22_B2KI_Fed_Com_1H_5M_BOPE_Choke_Diagram_20190212084112.pdf

Phoenix_21_22_B2KI_Fed_Com_1H_Flex_Line_Specs_20190212084113.pdf

BOP Diagram Attachment:

Phoenix_21_22_B2KI_Fed_Com_1H_5M_BOPE_Schematic_20190212084124.pdf

Phoenix_21_22_B2KI_Fed_Com_1H_Multi_Bowl_WH_20190212084125.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	430	0	430			430	H-40	48	ST&C	3.91	8.79	DRY	15.6	DRY	26.21
2	INTERMEDIATE	12.25	9.625	NEW	API	Y	0	3765	0	3765	3444		3765	J-55	36	LT&C	1.13	1.96	DRY	3.31	DRY	4.12
3	PRODUCTION	8.75	7.0	NEW	API	N	0	9152	0	8190			9152	P-110	26	LT&C	1.54	2.46	DRY	2.69	DRY	3.49
4	LINER	6.125	4.5	NEW	API	N	8410	18122	7713	8339			9712	P-110	13.5	LT&C	2.24	2.6	DRY	2.58	DRY	3.22

Casing Attachments

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Casing Attachments

Casing ID: 1 **String Type:**SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Phoenix_21_22_B2KI_Fed_Com_1H_Csg_Assumptions_20190212090605.pdf

Casing ID: 2 **String Type:**INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Phoenix_21_22_B2KI_Fed_Com_1H_Intermediate_Tapered_String_Diagram_20190212090535.pdf

Casing Design Assumptions and Worksheet(s):

Phoenix_21_22_B2KI_Fed_Com_1H_Csg_Assumptions_20190212090550.pdf

Casing ID: 3 **String Type:**PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Phoenix_21_22_B2KI_Fed_Com_1H_Csg_Assumptions_20190212090736.pdf

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Casing Attachments

Casing ID: 4 **String Type:**LINER

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Phoenix_21_22_B2KI_Fed_Com_1H_Csg_Assumptions_20190212090846.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	237	160	2.12	12.5	339	100	Class C	Salt, Gel, Extender, LCM
SURFACE	Tail		237	430	200	1.34	14.8	268	100	Class C	Retarder
INTERMEDIATE	Lead		0	3096	590	2.12	12.5	1251	25	Class C	Salt, Gel, Extender, LCM
INTERMEDIATE	Tail		3096	3765	200	1.34	14.8	268	25	Class C	Retarder
PRODUCTION	Lead		3565	5014	275	2.12	12.5	583	25	Class C	Gel, Retarder, Defoamer, Extender
PRODUCTION	Tail		5014	9152	400	1.18	15.6	472	25	Class H	Retarder, Fluid Loss, Defoamer
LINER	Lead		8410	18122	390	2.97	11.2	1158	25	Class C	Salt, Gel, Fluid Loss, Retarder, Dispersant, Defoamer, Anti-Settling Agent

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Lost circulation material Sweeps Mud scavengers in surface hole

Describe the mud monitoring system utilized: Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	430	SPUD MUD	8.6	8.8							
430	3765	SALT SATURATED	10	10							
3765	8190	WATER-BASED MUD	8.6	9.7							
8190	8339	OIL-BASED MUD	8.6	11							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Will run GR/CNL from KOP (8,410') to surface

List of open and cased hole logs run in the well:

CNL,DS,GR,MWD,MUDLOG

Coring operation description for the well:

None

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4770 **Anticipated Surface Pressure:** 2935.42

Anticipated Bottom Hole Temperature(F): 140

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Phoenix_21_22_B2KI_Fed_Com_1H_H2S_Plan_20190212091322.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Phoenix_21_22_B2KI_Fed_Com_1H_Dir_Plan_20190212091352.pdf
Phoenix_21_22_B2KI_Fed_Com_1H_Dir_Plot_20190212091353.pdf

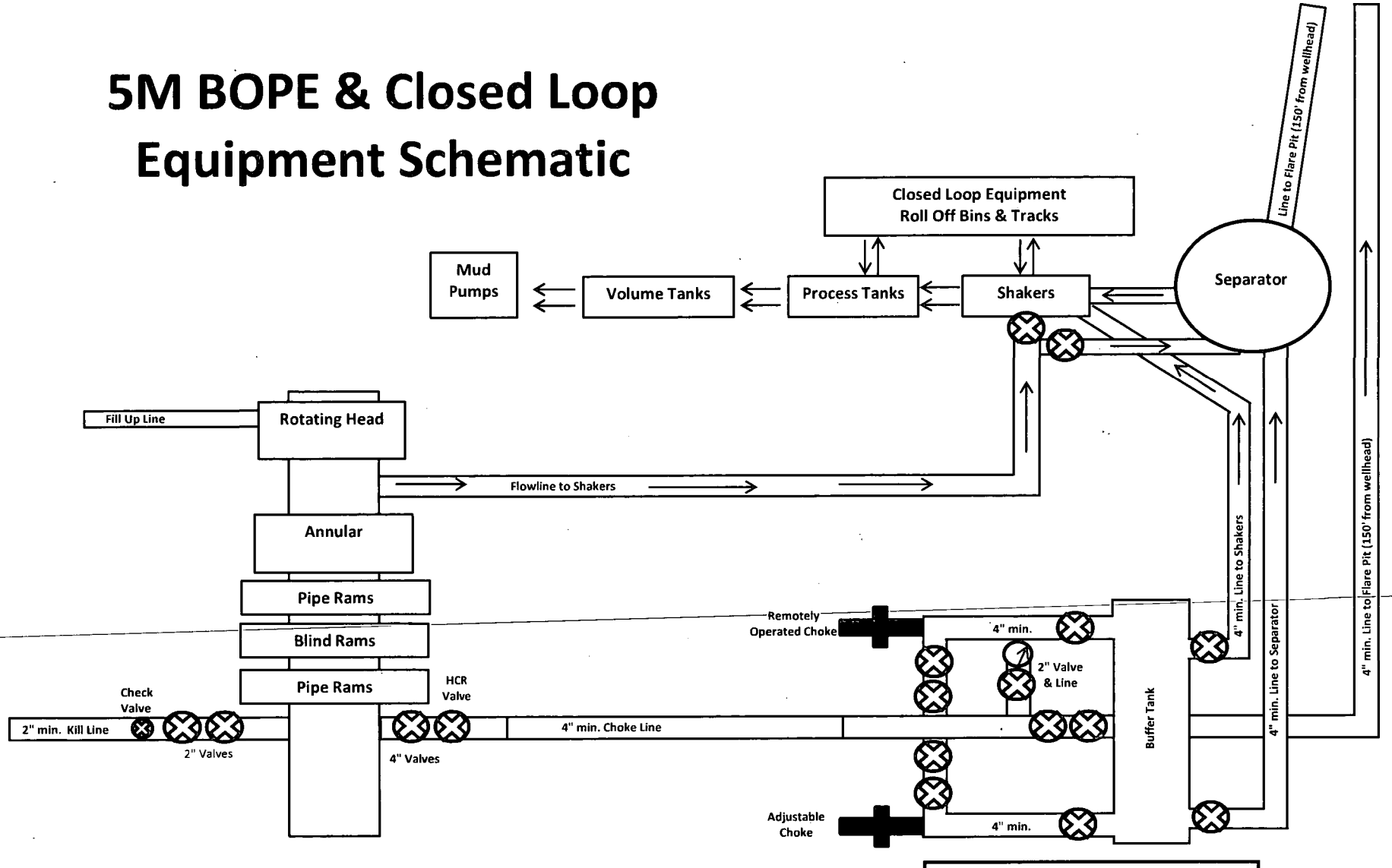
Other proposed operations facets description:

Other proposed operations facets attachment:

Phoenix_21_22_B2KI_Fed_Com_1H_C101_20190212091410.pdf
Phoenix_21_22_B2KI_Fed_Com_1H_Drlg_Program_20190212091411.pdf

Other Variance attachment:

5M BOPE & Closed Loop Equipment Schematic



Drawing not to scale

Note: All valves & lines on choke manifold are 4" unless otherwise noted. Exact manifold configuration may vary.

GATES E & S NORTH AMERICA, INC.
134 44TH STREET
CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: Tim.Cantu@gates.com
WEB: www.gates.com

10K CEMENTING ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	AUSTIN DISTRIBUTING	Test Date:	4/30/2015
Customer Ref. :	4060578	Hose Serial No.:	D-043015-7
Invoice No. :	500506	Created By:	JUSTIN CROPPER

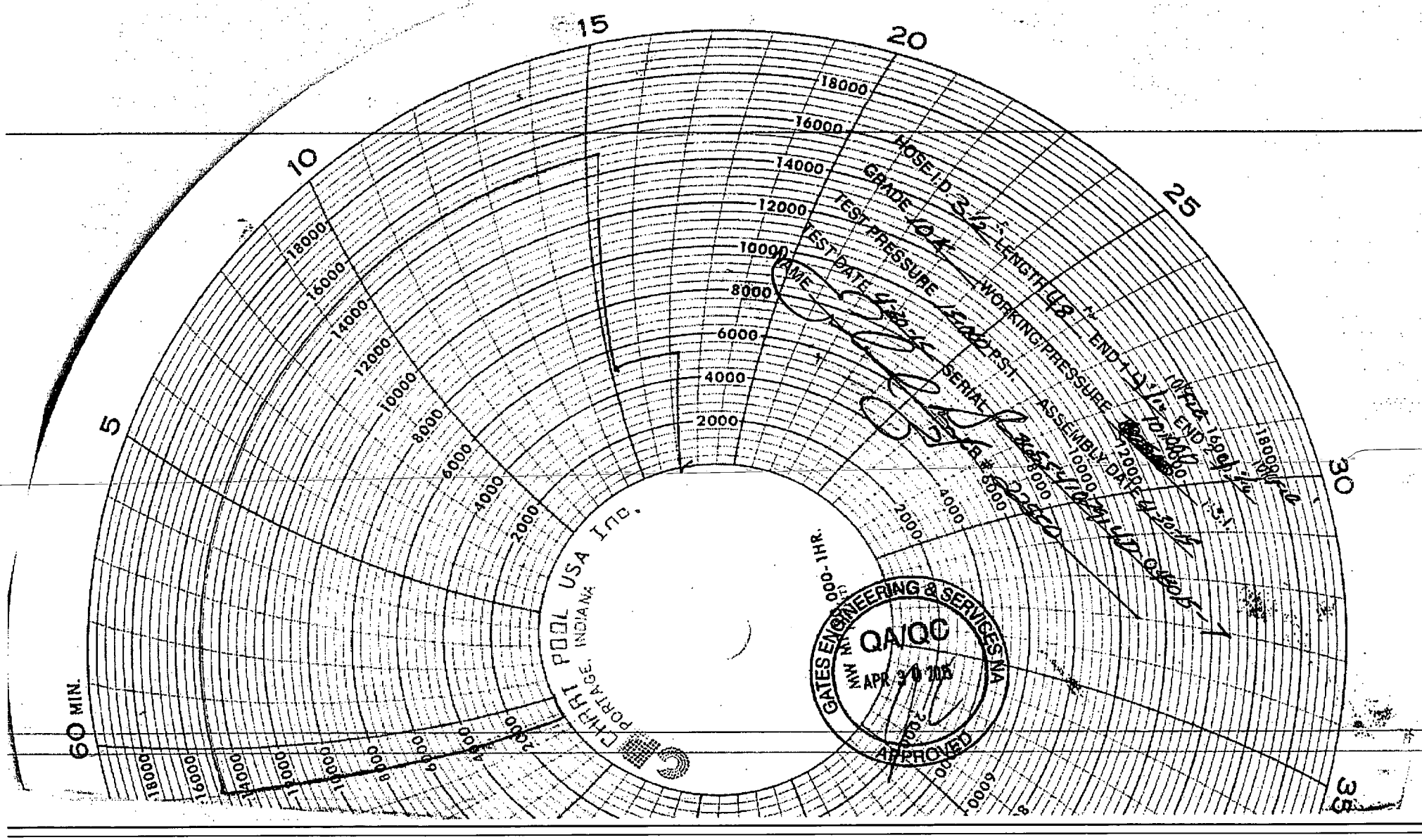
Product Description:	10K3.548.0CK4.1/1610KFLGE/E LE

End Fitting 1 :	4 1/16 10K FLG	End Fitting 2 :	4 1/16 10K FLG
Gates Part No. :	4773-6290	Assembly Code :	L36554102914D-043015-7
Working Pressure :	10,000 PSI	Test Pressure :	15,000 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 15,000 psi In accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality Manager :	QUALITY	Produciton:	PRODUCTION
Date :	4/30/2015	Date :	4/30/2015
Signature :		Signature :	

Form PTC - 01 Rev.0 2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GRADE 10K
LENGTH 48'
WORKING PRESSURE
TEST PRESSURE 15000 PSI.
TEST DATE 4-20-15
NAME
SERIAL # 5000
ASSEMBLY DATE 4-20-15
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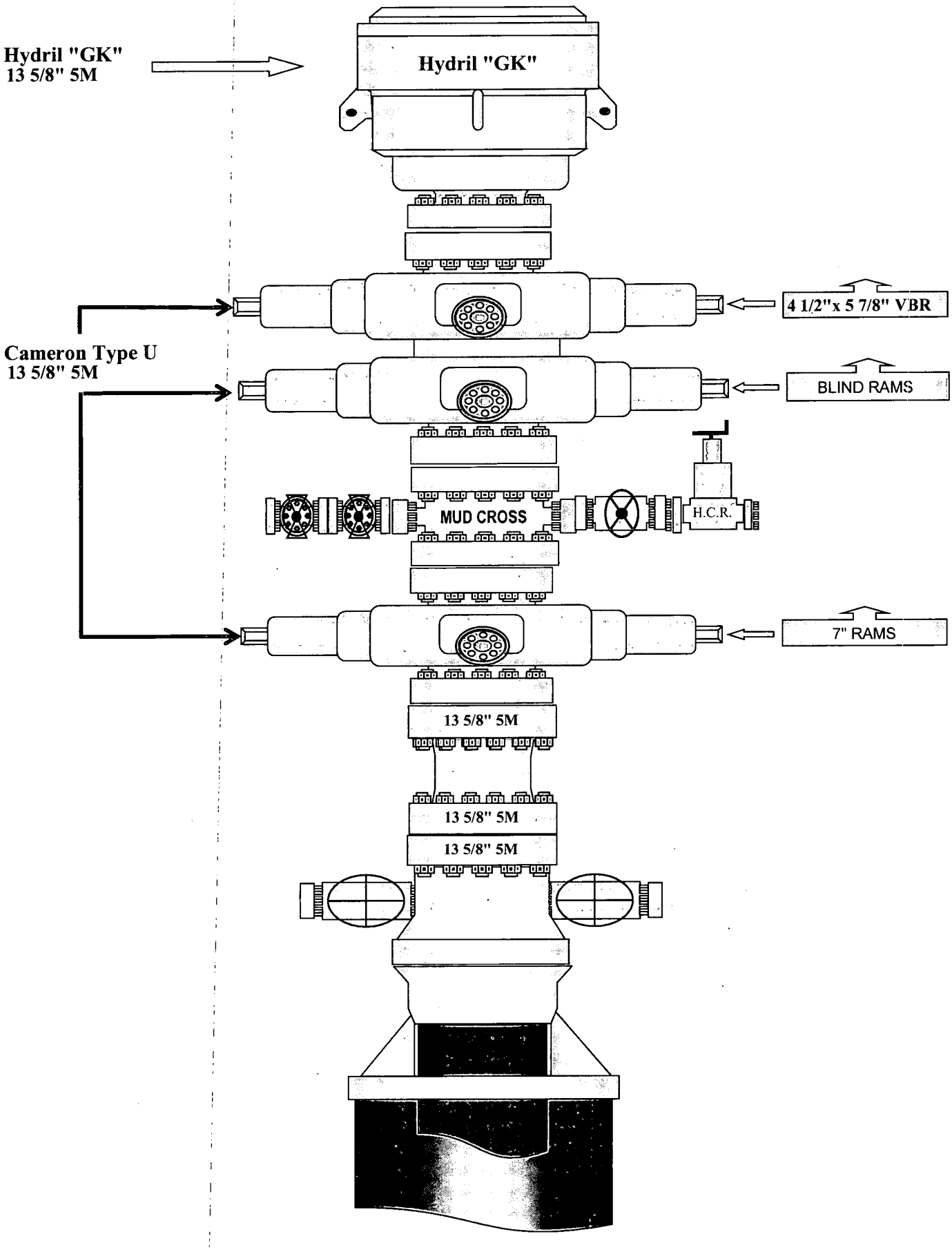
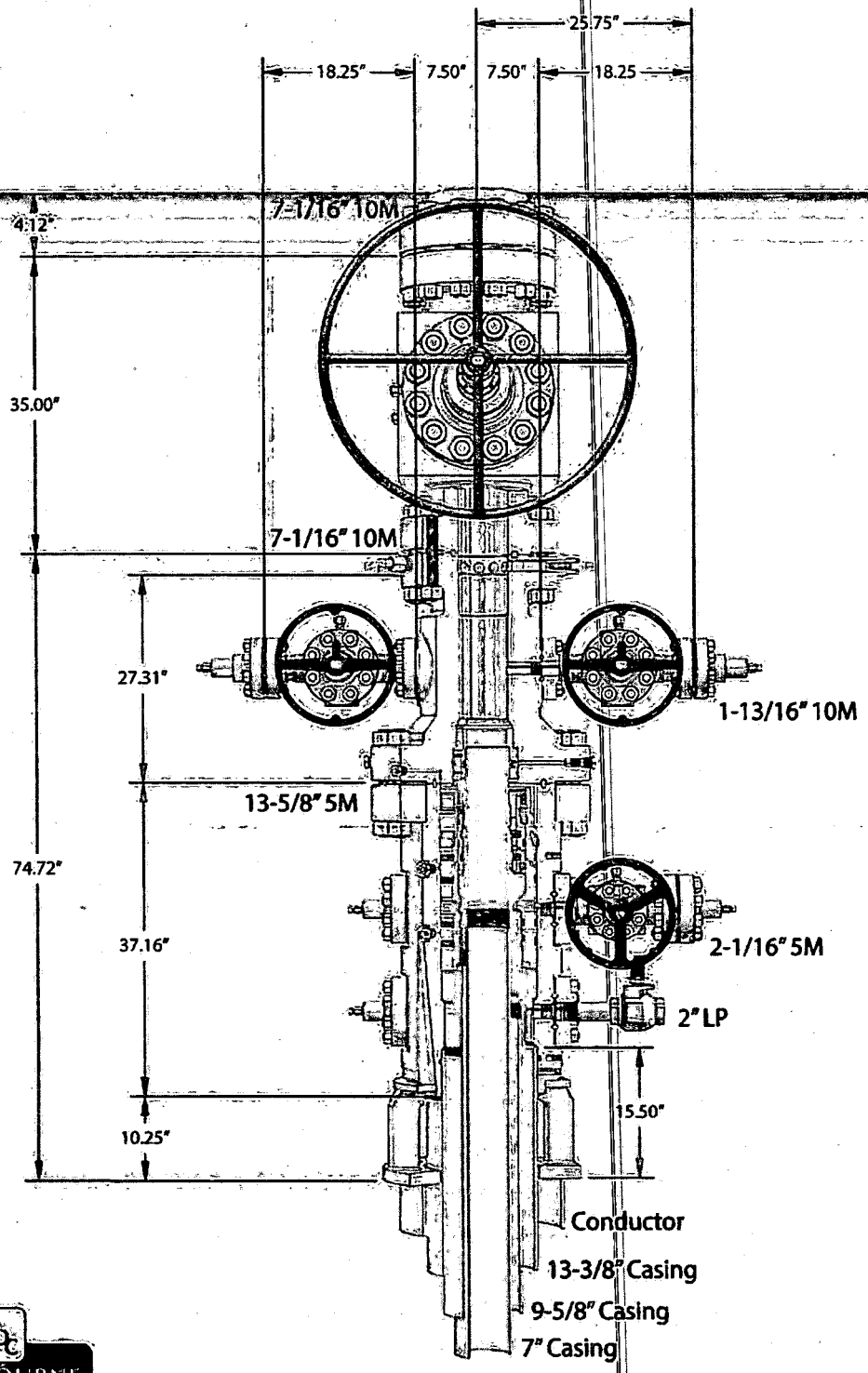
CHIPPI POOL USA Inc.
PORTAGE, INDIANA
GATES ENGINEERING & SERVICES NA
QA/QC
APPROVED

5M BOPE Schematic



CAMERON
A Schlumberger Company

13-5/8" MN-DS Wellhead System



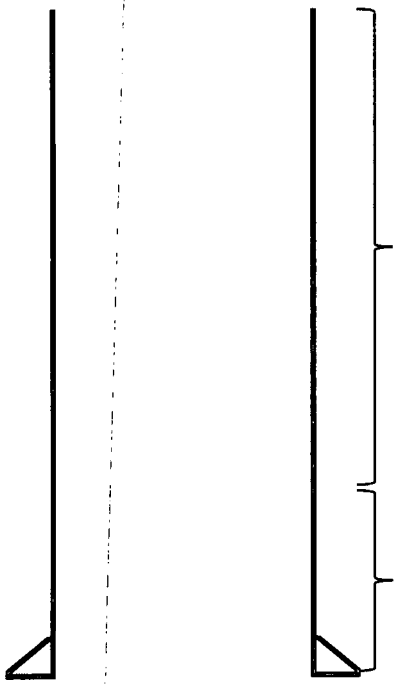
MEWBOURNE OIL COMPANY

C7585
Rev. 02
NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

Cutting flange 57" conductor cut-off

79

TAPERED STRING DIAGRAM



	COLLAPSE	BURST	JOINT YIELD	BODY YIELD
36#	1.130	1.960	3.310	4.120
40#	1.580	2.940	58.070	73.160

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

2. Casing Program

Hole Size	Casing Interval From	To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	430'	13.375"	48	H40	STC	3.91	8.79	15.60	26.21
12.25"	0'	3452'	9.625"	36	J55	LTC	1.13	1.96	3.31	4.12
12.25"	3452'	3765'	9.625"	40	L80	LTC	1.58	2.94	58.07	73.16
8.75"	0'	9152'	7"	26	P110	LTC	1.54	2.46	2.69	3.49
6.125"	8410'	18122'	4.5"	13.5	P110	LTC	2.24	2.60	2.58	3.22
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet	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

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? 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 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?	
Is well within the designated 4 string boundary.	
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?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

2. Casing Program

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	430'	13.375"	48	H40	STC	3.91	8.79	15.60	26.21
12.25"	0'	3452'	9.625"	36	J55	LTC	1.13	1.96	3.31	4.12
12.25"	3452'	3765'	9.625"	40	L80	LTC	1.58	2.94	58.07	73.16
8.75"	0'	9152'	7"	26	P110	LTC	1.54	2.46	2.69	3.49
6.125"	8410'	18122'	4.5"	13.5	P110	LTC	2.24	2.60	2.58	3.22
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet	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

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? 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 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?	
Is well within the designated 4 string boundary.	
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?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

2. Casing Program

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	430'	13.375"	48	H40	STC	3.91	8.79	15.60	26.21
12.25"	0'	3452'	9.625"	36	J55	LTC	1.13	1.96	3.31	4.12
12.25"	3452'	3765'	9.625"	40	L80	LTC	1.58	2.94	58.07	73.16
8.75"	0'	9152'	7"	26	P110	LTC	1.54	2.46	2.69	3.49
6.125"	8410'	18122'	4.5"	13.5	P110	LTC	2.24	2.60	2.58	3.22
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet	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

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? 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 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?	
Is well within the designated 4 string boundary.	
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?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

2. Casing Program

Hole Size	Casing Interval From	To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	430'	13.375"	48	H40	STC	3.91	8.79	15.60	26.21
12.25"	0'	3452'	9.625"	36	J55	LTC	1.13	1.96	3.31	4.12
12.25"	3452'	3765'	9.625"	40	L80	LTC	1.58	2.94	58.07	73.16
8.75"	0'	9152'	7"	26	P110	LTC	1.54	2.46	2.69	3.49
6.125"	8410'	18122'	4.5"	13.5	P110	LTC	2.24	2.60	2.58	3.22
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet	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

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? 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 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?	
Is well within the designated 4 string boundary.	
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?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

1. General Requirements

Rule 118 does not apply to this well because MOC has researched this area and no high concentrations of H2S were found. MOC will have on location and working all H2S safety equipment before the Delaware formation for purposes of safety and insurance requirements.

2. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

1. The hazards and characteristics of hydrogen sulfide gas.
2. The proper use of personal protective equipment and life support systems.
3. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
4. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

1 The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a know hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

3. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the 9 5/8" intermediate casing.

1. Well Control Equipment
   - A. Choke manifold with minimum of one adjustable choke/remote choke.
   - B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
   - C. Auxiliary equipment including annular type blowout preventer.
2. Protective Equipment for Essential Personnel
   Thirty minute self contained work unit located in the dog house and at briefing areas.

Additionally: If H2S is encountered in concentrations less than 10 ppm, fans will be placed in work areas to prevent the accumulation of hazardous amounts of poisonous gas. If higher concentrations of H2S are detected the well will be shut in and a rotating head, mud/gas separator, remote choke and flare line with igniter will be installed.

3. Hydrogen Sulfide Protection and Monitoring Equipment
Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 PPM.

4. Visual Warning Systems
A. Wind direction indicators as indicated on the wellsite diagram.
B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. Mud Program

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

5. Metallurgy

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

6. Communications

State & County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and toolpushers are either two way radios or cellular phones.

7. Well Testing

Drill stem testing is not an anticipated requirement for evaluation of this well. If a drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

8. Emergency Phone Numbers

Eddy County Sheriff's Office	**911 or 575-887-7551**
Ambulance Service	**911 or 575-885-2111**
Carlsbad Fire Dept	**911 or 575-885-2111**
Loco Hills Volunteer Fire Dept.	**911 or 575-677-3266**
Closest Medical Facility - Columbia Medical Center of Carlsbad	**575-492-5000**

Mewbourne Oil Company	**Hobbs District Office**	**575-393-5905**
	Fax	**575-397-6252**
	2nd Fax	**575-393-7259**
District Manager	**Robin Terrell**	**575-390-4816**
Drilling Superintendent	**Frosty Lathan**	**575-390-4103**
	Bradley Bishop	**575-390-6838**
Drilling Foreman	**Wesley Noseff**	**575-441-0729**

Mewbourne Oil Company

Eddy County, New Mexico NAD 83
Phoenix 21/22 B2KI Fed Com #1H
SL: 720 FNL & 270 FEL (Sec 29)
Sec 29, T18S, R30E
BHL: 1980 FSL & 100 FEL (Sec 22)

Plan: Design #1

Standard Planning Report

20 December, 2018

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Phoenix 21/22 B2KI Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3442.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3442.0usft (Original Well Elev)
Site:	Phoenix 21/22 B2KI Fed Com #1H	**North Reference:**	Grid
Well:	SL: 720 FNL & 270 FEL (Sec 29)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980 FSL & 100 FEL (Sec 22)		
Design:	Design #1		

Project	Eddy County, New Mexico NAD 83		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Phoenix 21/22 B2KI Fed Com #1H				
Site Position:		**Northing:**	627,202.00 usft	**Latitude:**	32.7237380
From:	Map	**Easting:**	648,023.00 usft	**Longitude:**	-103.9864215
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.19 °

Well	SL: 720 FNL & 270 FEL (Sec 29)				
Well Position	**+N/-S**	0.0 usft	**Northing:**	627,202.00 usft	**Latitude:**	32.7237380
	+E/-W	0.0 usft	**Easting:**	648,023.00 usft	**Longitude:**	-103.9864215
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	3,442.0 usft	**Ground Level:**	3,415.0 usft

Wellbore	BHL: 1980 FSL & 100 FEL (Sec 22)				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	12/20/2018	6.89	60.39	48,121

Design	Design #1			
Audit Notes:				
Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.0	0.0	0.0	75.77

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
430.0	0.00	0.00	430.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,398.9	29.53	25.39	2,312.9	448.4	212.8	1.50	1.50	0.00	25.39	
6,441.4	29.53	25.39	5,830.1	2,248.6	1,067.2	0.00	0.00	0.00	0.00	
8,410.3	0.00	0.00	7,713.0	2,697.0	1,280.0	1.50	-1.50	0.00	180.00	KOP: 1980 FSL & 101
9,151.8	89.05	89.87	8,190.0	2,698.0	1,749.1	12.01	12.01	0.00	89.87	
18,121.9	89.05	89.87	8,339.0	2,718.0	10,718.0	0.00	0.00	0.00	0.00	BHL: 1980 FSL & 100

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Site:	Phoenix 21/22 B2KI Fed Com #1H	**North Reference:**	Grid
Well:	SL: 720 FNL & 270 FEL (Sec 29)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980 FSL & 100 FEL (Sec 22)		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SL: 720 FNL & 270 FEL (Sec 29)									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
430.0	0.00	0.00	430.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	1.05	25.39	500.0	0.6	0.3	0.4	1.50	1.50	0.00
600.0	2.55	25.39	599.9	3.4	1.6	2.4	1.50	1.50	0.00
700.0	4.05	25.39	699.8	8.6	4.1	6.1	1.50	1.50	0.00
800.0	5.55	25.39	799.4	16.2	7.7	11.4	1.50	1.50	0.00
900.0	7.05	25.39	898.8	26.1	12.4	18.4	1.50	1.50	0.00
1,000.0	8.55	25.39	997.9	38.4	18.2	27.1	1.50	1.50	0.00
1,100.0	10.05	25.39	1,096.6	52.9	25.1	37.4	1.50	1.50	0.00
1,200.0	11.55	25.39	1,194.8	69.9	33.2	49.3	1.50	1.50	0.00
1,300.0	13.05	25.39	1,292.5	89.1	42.3	62.9	1.50	1.50	0.00
1,400.0	14.55	25.39	1,389.6	110.7	52.5	78.1	1.50	1.50	0.00
1,500.0	16.05	25.39	1,486.1	134.5	63.8	94.9	1.50	1.50	0.00
1,600.0	17.55	25.39	1,581.8	160.6	76.2	113.4	1.50	1.50	0.00
1,700.0	19.05	25.39	1,676.7	189.0	89.7	133.4	1.50	1.50	0.00
1,800.0	20.55	25.39	1,770.8	219.6	104.2	155.0	1.50	1.50	0.00
1,900.0	22.05	25.39	1,864.0	252.4	119.8	178.2	1.50	1.50	0.00
2,000.0	23.55	25.39	1,956.2	287.4	136.4	202.9	1.50	1.50	0.00
2,100.0	25.05	25.39	2,047.3	324.6	154.0	229.1	1.50	1.50	0.00
2,200.0	26.55	25.39	2,137.3	363.9	172.7	256.9	1.50	1.50	0.00
2,300.0	28.05	25.39	2,226.2	405.3	192.4	286.1	1.50	1.50	0.00
2,398.9	29.53	25.39	2,312.9	448.4	212.8	316.5	1.50	1.50	0.00
2,400.0	29.53	25.39	2,313.8	448.9	213.0	316.8	0.00	0.00	0.00
2,500.0	29.53	25.39	2,400.8	493.4	234.2	348.3	0.00	0.00	0.00
2,600.0	29.53	25.39	2,487.8	537.9	255.3	379.7	0.00	0.00	0.00
2,660.8	29.53	25.39	2,540.7	565.0	268.1	398.8	0.00	0.00	0.00
PPP1: 154 FNL & 0 FEL (Sec 29)									
2,700.0	29.53	25.39	2,574.8	582.5	276.4	411.1	0.00	0.00	0.00
2,800.0	29.53	25.39	2,661.8	627.0	297.6	442.6	0.00	0.00	0.00
2,900.0	29.53	25.39	2,748.9	671.5	318.7	474.0	0.00	0.00	0.00
3,000.0	29.53	25.39	2,835.9	716.1	339.8	505.4	0.00	0.00	0.00
3,010.2	29.53	25.39	2,844.7	720.6	342.0	508.6	0.00	0.00	0.00
PPP2: 0 FNL & 74 FWL (Sec 28)									
3,100.0	29.53	25.39	2,922.9	760.6	361.0	536.9	0.00	0.00	0.00
3,200.0	29.53	25.39	3,009.9	805.1	382.1	568.3	0.00	0.00	0.00
3,300.0	29.53	25.39	3,096.9	849.7	403.2	599.7	0.00	0.00	0.00
3,400.0	29.53	25.39	3,183.9	894.2	424.4	631.2	0.00	0.00	0.00
3,500.0	29.53	25.39	3,270.9	938.7	445.5	662.6	0.00	0.00	0.00
3,600.0	29.53	25.39	3,357.9	983.3	466.7	694.0	0.00	0.00	0.00
3,700.0	29.53	25.39	3,444.9	1,027.8	487.8	725.5	0.00	0.00	0.00
3,800.0	29.53	25.39	3,531.9	1,072.3	508.9	756.9	0.00	0.00	0.00
3,900.0	29.53	25.39	3,618.9	1,116.9	530.1	788.3	0.00	0.00	0.00
4,000.0	29.53	25.39	3,705.9	1,161.4	551.2	819.8	0.00	0.00	0.00
4,100.0	29.53	25.39	3,792.9	1,205.9	572.3	851.2	0.00	0.00	0.00
4,200.0	29.53	25.39	3,879.9	1,250.5	593.5	882.6	0.00	0.00	0.00
4,300.0	29.53	25.39	3,966.9	1,295.0	614.6	914.1	0.00	0.00	0.00
4,400.0	29.53	25.39	4,053.9	1,339.5	635.7	945.5	0.00	0.00	0.00
4,500.0	29.53	25.39	4,141.0	1,384.0	656.9	976.9	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Phoenix 21/22 B2KI Fed Com #1H
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Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3442.0usft (Original Well Elev)
Site:	Phoenix 21/22 B2KI Fed Com #1H	**North Reference:**	Grid
Well:	SL: 720 FNL & 270 FEL (Sec 29)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980 FSL & 100 FEL (Sec 22)		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.0	29.53	25.39	4,228.0	1,428.6	678.0	1,008.4	0.00	0.00	0.00
4,700.0	29.53	25.39	4,315.0	1,473.1	699.1	1,039.8	0.00	0.00	0.00
4,800.0	29.53	25.39	4,402.0	1,517.6	720.3	1,071.2	0.00	0.00	0.00
4,900.0	29.53	25.39	4,489.0	1,562.2	741.4	1,102.7	0.00	0.00	0.00
5,000.0	29.53	25.39	4,576.0	1,606.7	762.5	1,134.1	0.00	0.00	0.00
5,100.0	29.53	25.39	4,663.0	1,651.2	783.7	1,165.5	0.00	0.00	0.00
5,200.0	29.53	25.39	4,750.0	1,695.8	804.8	1,197.0	0.00	0.00	0.00
5,300.0	29.53	25.39	4,837.0	1,740.3	826.0	1,228.4	0.00	0.00	0.00
5,400.0	29.53	25.39	4,924.0	1,784.8	847.1	1,259.8	0.00	0.00	0.00
5,500.0	29.53	25.39	5,011.0	1,829.4	868.2	1,291.3	0.00	0.00	0.00
5,600.0	29.53	25.39	5,098.0	1,873.9	889.4	1,322.7	0.00	0.00	0.00
5,700.0	29.53	25.39	5,185.0	1,918.4	910.5	1,354.1	0.00	0.00	0.00
5,800.0	29.53	25.39	5,272.0	1,963.0	931.6	1,385.6	0.00	0.00	0.00
5,900.0	29.53	25.39	5,359.0	2,007.5	952.8	1,417.0	0.00	0.00	0.00
6,000.0	29.53	25.39	5,446.1	2,052.0	973.9	1,448.4	0.00	0.00	0.00
6,100.0	29.53	25.39	5,533.1	2,096.6	995.0	1,479.9	0.00	0.00	0.00
6,200.0	29.53	25.39	5,620.1	2,141.1	1,016.2	1,511.3	0.00	0.00	0.00
6,300.0	29.53	25.39	5,707.1	2,185.6	1,037.3	1,542.7	0.00	0.00	0.00
6,400.0	29.53	25.39	5,794.1	2,230.2	1,058.4	1,574.2	0.00	0.00	0.00
6,441.4	29.53	25.39	5,830.1	2,248.6	1,067.2	1,587.2	0.00	0.00	0.00
6,500.0	28.66	25.39	5,881.3	2,274.4	1,079.4	1,605.4	1.50	-1.50	0.00
6,600.0	27.16	25.39	5,969.7	2,316.6	1,099.5	1,635.2	1.50	-1.50	0.00
6,700.0	25.66	25.39	6,059.2	2,356.8	1,118.5	1,663.6	1.50	-1.50	0.00
6,800.0	24.16	25.39	6,149.9	2,394.9	1,136.6	1,690.4	1.50	-1.50	0.00
6,900.0	22.66	25.39	6,241.7	2,430.7	1,153.6	1,715.7	1.50	-1.50	0.00
7,000.0	21.16	25.39	6,334.5	2,464.4	1,169.6	1,739.5	1.50	-1.50	0.00
7,100.0	19.66	25.39	6,428.2	2,495.9	1,184.6	1,761.8	1.50	-1.50	0.00
7,200.0	18.16	25.39	6,522.8	2,525.2	1,198.5	1,782.4	1.50	-1.50	0.00
7,300.0	16.66	25.39	6,618.2	2,552.2	1,211.3	1,801.5	1.50	-1.50	0.00
7,400.0	15.16	25.39	6,714.4	2,577.0	1,223.0	1,819.0	1.50	-1.50	0.00
7,500.0	13.66	25.39	6,811.2	2,599.5	1,233.7	1,834.8	1.50	-1.50	0.00
7,600.0	12.16	25.39	6,908.7	2,619.6	1,243.3	1,849.1	1.50	-1.50	0.00
7,700.0	10.66	25.39	7,006.7	2,637.5	1,251.8	1,861.7	1.50	-1.50	0.00
7,800.0	9.16	25.39	7,105.3	2,653.0	1,259.1	1,872.7	1.50	-1.50	0.00
7,900.0	7.66	25.39	7,204.2	2,666.2	1,265.4	1,882.0	1.50	-1.50	0.00
8,000.0	6.16	25.39	7,303.4	2,677.1	1,270.6	1,889.6	1.50	-1.50	0.00
8,100.0	4.66	25.39	7,403.0	2,685.6	1,274.6	1,895.6	1.50	-1.50	0.00
8,200.0	3.16	25.39	7,502.8	2,691.8	1,277.5	1,900.0	1.50	-1.50	0.00
8,300.0	1.66	25.39	7,602.7	2,695.6	1,279.3	1,902.7	1.50	-1.50	0.00
8,400.0	0.16	25.39	7,702.7	2,697.0	1,280.0	1,903.7	1.50	-1.50	0.00
8,410.3	0.00	0.00	7,713.0	2,697.0	1,280.0	1,903.7	1.50	-1.50	0.00
KOP: 1980 FSL & 1019 FWL (Sec 21)									
8,500.0	10.77	89.87	7,802.1	2,697.0	1,288.4	1,911.8	12.01	12.01	0.00
8,600.0	22.78	89.87	7,897.7	2,697.1	1,317.2	1,939.8	12.01	12.01	0.00
8,700.0	34.79	89.87	7,985.2	2,697.2	1,365.3	1,986.4	12.01	12.01	0.00
8,800.0	46.80	89.87	8,060.8	2,697.3	1,430.5	2,049.6	12.01	12.01	0.00
8,900.0	58.81	89.87	8,121.1	2,697.5	1,510.0	2,126.7	12.01	12.01	0.00
9,000.0	70.82	89.87	8,163.6	2,697.7	1,600.3	2,214.3	12.01	12.01	0.00
9,100.0	82.83	89.87	8,186.3	2,697.9	1,697.5	2,308.6	12.01	12.01	0.00
9,132.1	86.68	89.87	8,189.3	2,698.0	1,729.4	2,339.6	12.01	12.01	0.00
FTP: 1980 FSL & 1417 FWL (Sec 21)									
9,151.8	89.05	89.87	8,190.0	2,698.0	1,749.1	2,358.7	12.01	12.01	0.00
9,200.0	89.05	89.87	8,190.8	2,698.2	1,797.3	2,405.4	0.00	0.00	0.00
9,300.0	89.05	89.87	8,192.5	2,698.4	1,897.3	2,502.4	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Phoenix 21/22 B2KI Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3442.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3442.0usft (Original Well Elev)
Site:	Phoenix 21/22 B2KI Fed Com #1H	**North Reference:**	Grid
Well:	SL: 720 FNL & 270 FEL (Sec 29)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980 FSL & 100 FEL (Sec 22)		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,400.0	89.05	89.87	8,194.1	2,698.6	1,997.3	2,599.4	0.00	0.00	0.00
9,500.0	89.05	89.87	8,195.8	2,698.8	2,097.3	2,696.3	0.00	0.00	0.00
9,600.0	89.05	89.87	8,197.4	2,699.0	2,197.3	2,793.3	0.00	0.00	0.00
9,700.0	89.05	89.87	8,199.1	2,699.3	2,297.3	2,890.3	0.00	0.00	0.00
9,800.0	89.05	89.87	8,200.8	2,699.5	2,397.3	2,987.3	0.00	0.00	0.00
9,900.0	89.05	89.87	8,202.4	2,699.7	2,497.2	3,084.2	0.00	0.00	0.00
10,000.0	89.05	89.87	8,204.1	2,699.9	2,597.2	3,181.2	0.00	0.00	0.00
10,100.0	89.05	89.87	8,205.8	2,700.2	2,697.2	3,278.2	0.00	0.00	0.00
10,200.0	89.05	89.87	8,207.4	2,700.4	2,797.2	3,375.2	0.00	0.00	0.00
10,300.0	89.05	89.87	8,209.1	2,700.6	2,897.2	3,472.1	0.00	0.00	0.00
10,302.8	89.05	89.87	8,209.1	2,700.6	2,900.0	3,474.9	0.00	0.00	0.00
PPP4: 1980 FSL & 2640 FWL (Sec 21)									
10,400.0	89.05	89.87	8,210.7	2,700.8	2,997.2	3,569.1	0.00	0.00	0.00
10,500.0	89.05	89.87	8,212.4	2,701.0	3,097.2	3,666.1	0.00	0.00	0.00
10,600.0	89.05	89.87	8,214.1	2,701.3	3,197.1	3,763.1	0.00	0.00	0.00
10,700.0	89.05	89.87	8,215.7	2,701.5	3,297.1	3,860.0	0.00	0.00	0.00
10,800.0	89.05	89.87	8,217.4	2,701.7	3,397.1	3,957.0	0.00	0.00	0.00
10,900.0	89.05	89.87	8,219.0	2,701.9	3,497.1	4,054.0	0.00	0.00	0.00
11,000.0	89.05	89.87	8,220.7	2,702.2	3,597.1	4,150.9	0.00	0.00	0.00
11,100.0	89.05	89.87	8,222.4	2,702.4	3,697.1	4,247.9	0.00	0.00	0.00
11,200.0	89.05	89.87	8,224.0	2,702.6	3,797.1	4,344.9	0.00	0.00	0.00
11,300.0	89.05	89.87	8,225.7	2,702.8	3,897.0	4,441.9	0.00	0.00	0.00
11,400.0	89.05	89.87	8,227.3	2,703.0	3,997.0	4,538.8	0.00	0.00	0.00
11,500.0	89.05	89.87	8,229.0	2,703.3	4,097.0	4,635.8	0.00	0.00	0.00
11,600.0	89.05	89.87	8,230.7	2,703.5	4,197.0	4,732.8	0.00	0.00	0.00
11,700.0	89.05	89.87	8,232.3	2,703.7	4,297.0	4,829.8	0.00	0.00	0.00
11,800.0	89.05	89.87	8,234.0	2,703.9	4,397.0	4,926.7	0.00	0.00	0.00
11,900.0	89.05	89.87	8,235.6	2,704.2	4,497.0	5,023.7	0.00	0.00	0.00
12,000.0	89.05	89.87	8,237.3	2,704.4	4,596.9	5,120.7	0.00	0.00	0.00
12,100.0	89.05	89.87	8,239.0	2,704.6	4,696.9	5,217.6	0.00	0.00	0.00
12,200.0	89.05	89.87	8,240.6	2,704.8	4,796.9	5,314.6	0.00	0.00	0.00
12,300.0	89.05	89.87	8,242.3	2,705.0	4,896.9	5,411.6	0.00	0.00	0.00
12,400.0	89.05	89.87	8,244.0	2,705.3	4,996.9	5,508.6	0.00	0.00	0.00
12,500.0	89.05	89.87	8,245.6	2,705.5	5,096.9	5,605.5	0.00	0.00	0.00
12,600.0	89.05	89.87	8,247.3	2,705.7	5,196.9	5,702.5	0.00	0.00	0.00
12,700.0	89.05	89.87	8,248.9	2,705.9	5,296.8	5,799.5	0.00	0.00	0.00
12,800.0	89.05	89.87	8,250.6	2,706.2	5,396.8	5,896.5	0.00	0.00	0.00
12,900.0	89.05	89.87	8,252.3	2,706.4	5,496.8	5,993.4	0.00	0.00	0.00
13,000.0	89.05	89.87	8,253.9	2,706.6	5,596.8	6,090.4	0.00	0.00	0.00
13,100.0	89.05	89.87	8,255.6	2,706.8	5,696.8	6,187.4	0.00	0.00	0.00
13,200.0	89.05	89.87	8,257.2	2,707.1	5,796.8	6,284.3	0.00	0.00	0.00
13,300.0	89.05	89.87	8,258.9	2,707.3	5,896.8	6,381.3	0.00	0.00	0.00
13,400.0	89.05	89.87	8,260.6	2,707.5	5,996.8	6,478.3	0.00	0.00	0.00
13,500.0	89.05	89.87	8,262.2	2,707.7	6,096.7	6,575.3	0.00	0.00	0.00
13,600.0	89.05	89.87	8,263.9	2,707.9	6,196.7	6,672.2	0.00	0.00	0.00
13,700.0	89.05	89.87	8,265.5	2,708.2	6,296.7	6,769.2	0.00	0.00	0.00
13,800.0	89.05	89.87	8,267.2	2,708.4	6,396.7	6,866.2	0.00	0.00	0.00
13,900.0	89.05	89.87	8,268.9	2,708.6	6,496.7	6,963.2	0.00	0.00	0.00
14,000.0	89.05	89.87	8,270.5	2,708.8	6,596.7	7,060.1	0.00	0.00	0.00
14,100.0	89.05	89.87	8,272.2	2,709.1	6,696.7	7,157.1	0.00	0.00	0.00
14,200.0	89.05	89.87	8,273.9	2,709.3	6,796.6	7,254.1	0.00	0.00	0.00
14,261.4	89.05	89.87	8,274.9	2,709.4	6,858.0	7,313.6	0.00	0.00	0.00
PPP5: 1980 FSL & 1320 FWL (Sec 22)									
14,300.0	89.05	89.87	8,275.5	2,709.5	6,896.6	7,351.0	0.00	0.00	0.00

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Phoenix 21/22 B2KI Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3442.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3442.0usft (Original Well Elev)
Site:	Phoenix 21/22 B2KI Fed Com #1H	**North Reference:**	Grid
Well:	SL: 720 FNL & 270 FEL (Sec 29)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980 FSL & 100 FEL (Sec 22)		
Design:	Design #1		

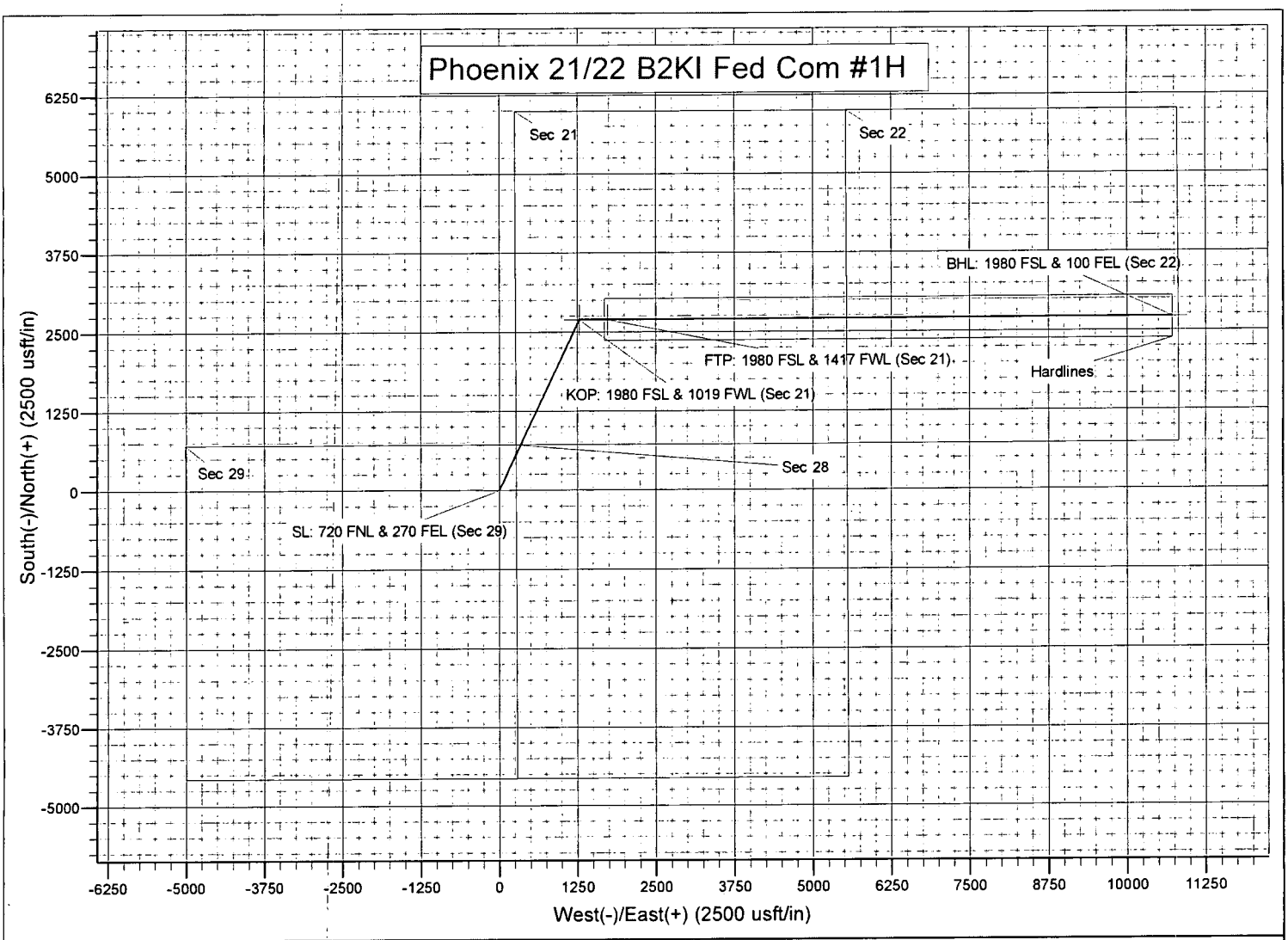
Planned Survey

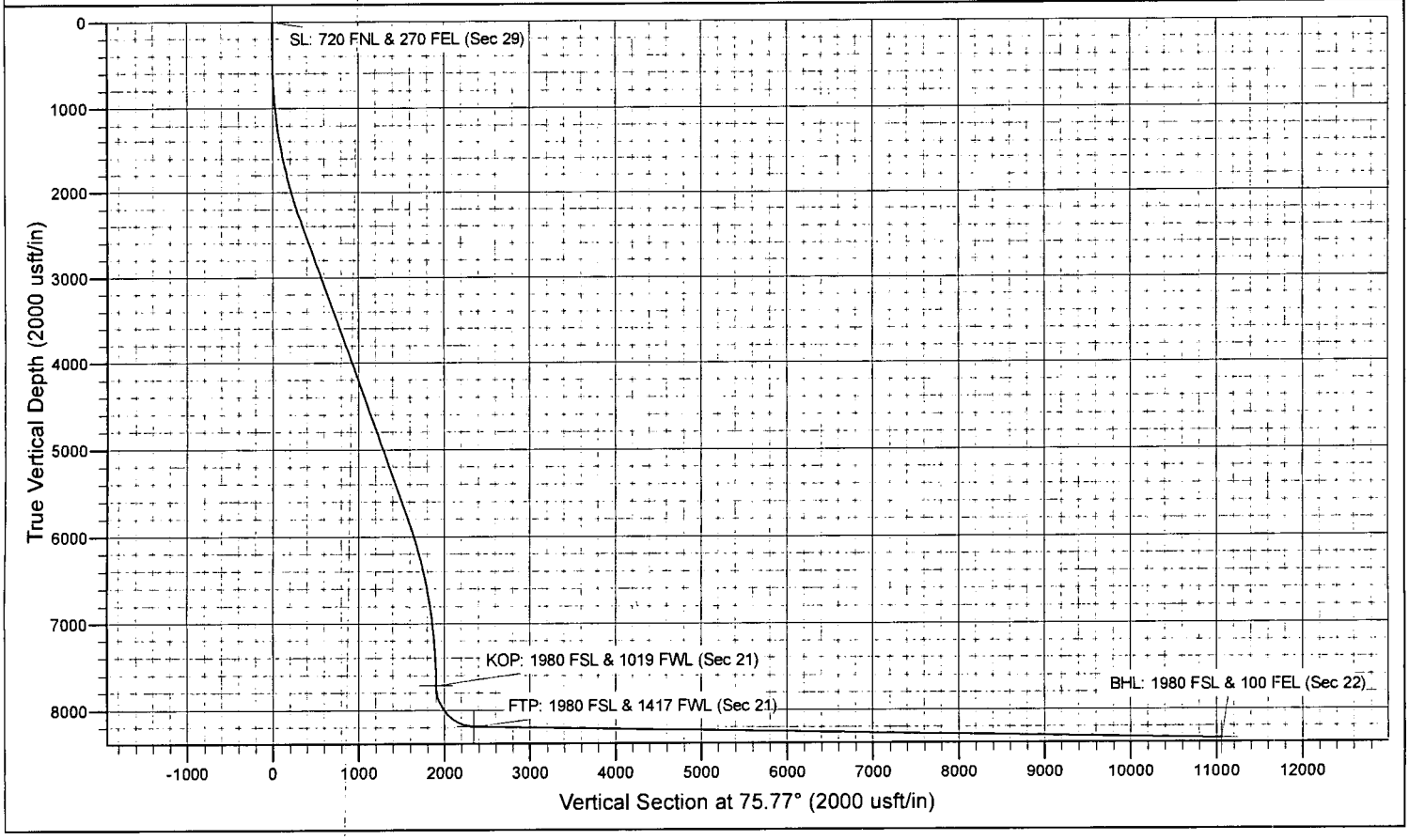
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,400.0	89.05	89.87	8,277.2	2,709.7	6,996.6	7,448.0	0.00	0.00	0.00
14,500.0	89.05	89.87	8,278.8	2,709.9	7,096.6	7,545.0	0.00	0.00	0.00
14,600.0	89.05	89.87	8,280.5	2,710.2	7,196.6	7,642.0	0.00	0.00	0.00
14,700.0	89.05	89.87	8,282.2	2,710.4	7,296.6	7,738.9	0.00	0.00	0.00
14,800.0	89.05	89.87	8,283.8	2,710.6	7,396.6	7,835.9	0.00	0.00	0.00
14,900.0	89.05	89.87	8,285.5	2,710.8	7,496.5	7,932.9	0.00	0.00	0.00
15,000.0	89.05	89.87	8,287.1	2,711.1	7,596.5	8,029.9	0.00	0.00	0.00
15,100.0	89.05	89.87	8,288.8	2,711.3	7,696.5	8,126.8	0.00	0.00	0.00
15,200.0	89.05	89.87	8,290.5	2,711.5	7,796.5	8,223.8	0.00	0.00	0.00
15,300.0	89.05	89.87	8,292.1	2,711.7	7,896.5	8,320.8	0.00	0.00	0.00
15,400.0	89.05	89.87	8,293.8	2,711.9	7,996.5	8,417.7	0.00	0.00	0.00
15,500.0	89.05	89.87	8,295.4	2,712.2	8,096.5	8,514.7	0.00	0.00	0.00
15,600.0	89.05	89.87	8,297.1	2,712.4	8,196.4	8,611.7	0.00	0.00	0.00
15,700.0	89.05	89.87	8,298.8	2,712.6	8,296.4	8,708.7	0.00	0.00	0.00
15,800.0	89.05	89.87	8,300.4	2,712.8	8,396.4	8,805.6	0.00	0.00	0.00
15,900.0	89.05	89.87	8,302.1	2,713.1	8,496.4	8,902.6	0.00	0.00	0.00
16,000.0	89.05	89.87	8,303.8	2,713.3	8,596.4	8,999.6	0.00	0.00	0.00
16,100.0	89.05	89.87	8,305.4	2,713.5	8,696.4	9,096.6	0.00	0.00	0.00
16,200.0	89.05	89.87	8,307.1	2,713.7	8,796.4	9,193.5	0.00	0.00	0.00
16,300.0	89.05	89.87	8,308.7	2,713.9	8,896.3	9,290.5	0.00	0.00	0.00
16,400.0	89.05	89.87	8,310.4	2,714.2	8,996.3	9,387.5	0.00	0.00	0.00
16,500.0	89.05	89.87	8,312.1	2,714.4	9,096.3	9,484.4	0.00	0.00	0.00
16,600.0	89.05	89.87	8,313.7	2,714.6	9,196.3	9,581.4	0.00	0.00	0.00
16,700.0	89.05	89.87	8,315.4	2,714.8	9,296.3	9,678.4	0.00	0.00	0.00
16,800.0	89.05	89.87	8,317.0	2,715.1	9,396.3	9,775.4	0.00	0.00	0.00
16,900.0	89.05	89.87	8,318.7	2,715.3	9,496.3	9,872.3	0.00	0.00	0.00
16,901.7	89.05	89.87	8,318.7	2,715.3	9,498.0	9,874.0	0.00	0.00	0.00
PPP6: 1980 FSL & 1320 FEL (Sec 22)									
17,000.0	89.05	89.87	8,320.4	2,715.5	9,596.2	9,969.3	0.00	0.00	0.00
17,100.0	89.05	89.87	8,322.0	2,715.7	9,696.2	10,066.3	0.00	0.00	0.00
17,200.0	89.05	89.87	8,323.7	2,715.9	9,796.2	10,163.3	0.00	0.00	0.00
17,300.0	89.05	89.87	8,325.3	2,716.2	9,896.2	10,260.2	0.00	0.00	0.00
17,400.0	89.05	89.87	8,327.0	2,716.4	9,996.2	10,357.2	0.00	0.00	0.00
17,500.0	89.05	89.87	8,328.7	2,716.6	10,096.2	10,454.2	0.00	0.00	0.00
17,600.0	89.05	89.87	8,330.3	2,716.8	10,196.2	10,551.1	0.00	0.00	0.00
17,700.0	89.05	89.87	8,332.0	2,717.1	10,296.1	10,648.1	0.00	0.00	0.00
17,800.0	89.05	89.87	8,333.7	2,717.3	10,396.1	10,745.1	0.00	0.00	0.00
17,900.0	89.05	89.87	8,335.3	2,717.5	10,496.1	10,842.1	0.00	0.00	0.00
18,000.0	89.05	89.87	8,337.0	2,717.7	10,596.1	10,939.0	0.00	0.00	0.00
18,100.0	89.05	89.87	8,338.6	2,718.0	10,696.1	11,036.0	0.00	0.00	0.00
18,121.9	89.05	89.87	8,339.0	2,718.0	10,718.0	11,057.3	0.00	0.00	0.00
BHL: 1980 FSL & 100 FEL (Sec 22)									

Database:	Hobbs	**Local Co-ordinate Reference:**	Site Phoenix 21/22 B2KI Fed Com #1H
Company:	Mewbourne Oil Company	**TVD Reference:**	WELL @ 3442.0usft (Original Well Elev)
Project:	Eddy County, New Mexico NAD 83	**MD Reference:**	WELL @ 3442.0usft (Original Well Elev)
Site:	Phoenix 21/22 B2KI Fed Com #1H	**North Reference:**	Grid
Well:	SL: 720 FNL & 270 FEL (Sec 29)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BHL: 1980 FSL & 100 FEL (Sec 22)		
Design:	Design #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SL: 720 FNL & 270 FEL - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	627,202.00	648,023.00	32.7237380	-103.9864215
PPP1: 154 FNL & 0 FEL - plan hits target center - Point	0.00	0.00	2,540.7	565.0	268.1	627,767.00	648,291.15	32.7252886	-103.9855436
PPP2: 0 FNL & 74 FWL - plan hits target center - Point	0.00	0.00	2,844.7	720.6	342.0	627,922.61	648,365.00	32.7257156	-103.9853018
KOP: 1980 FSL & 1019 - plan hits target center - Point	0.00	0.00	7,713.0	2,697.0	1,280.0	629,899.00	649,303.00	32.7311395	-103.9822304
FTP: 1980 FSL & 1417 F - plan hits target center - Point	0.00	0.00	8,189.3	2,698.0	1,729.4	629,900.00	649,752.43	32.7311381	-103.9807688
PPP4: 1980 FSL & 2640 - plan hits target center - Point	0.00	0.00	8,209.1	2,700.6	2,900.0	629,902.61	650,923.00	32.7311345	-103.9769622
PPP5: 1980 FSL & 1320 - plan hits target center - Point	0.00	0.00	8,274.9	2,709.4	6,858.0	629,911.42	654,881.00	32.7311215	-103.9640909
PPP6: 1980 FSL & 1320 - plan hits target center - Point	0.00	0.00	8,318.7	2,715.3	9,498.0	629,917.29	657,521.00	32.7311121	-103.9555058
BHL: 1980 FSL & 100 FI - plan hits target center - Point	0.00	0.01	8,339.0	2,718.0	10,718.0	629,920.00	658,741.00	32.7311075	-103.9515384


Phoenix 21/22 B2KI Fed Com #1H
Sec 21
Sec 22
BHL: 1980 FSL & 100 FEL (Sec 22)
FTP: 1980 FSL & 1417 FWL (Sec 21)
Hardlines
KOP: 1980 FSL & 1019 FWL (Sec 21)
Sec 29
Sec 28
SL: 720 FNL & 270 FEL (Sec 29)
South(-)/North(+) (2500 usft/in)
West(-)/East(+) (2500 usft/in)
6250
5000
3750
2500
1250
0
-1250
-2500
-3750
-5000
-6250
-5000
-3750
-2500
-1250
0
1250
2500
3750
5000
6250
7500
8750
10000
11250


SL: 720 FNL & 270 FEL (Sec 29)
KOP: 1980 FSL & 1019 FWL (Sec 21)
FTP: 1980 FSL & 1417 FWL (Sec 21)
BHL: 1980 FSL & 100 FEL (Sec 22)
True Vertical Depth (2000 usft/in)
Vertical Section at 75.77° (2000 usft/in)
0
1000
2000
3000
4000
5000
6000
7000
8000
-1000
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

2. Casing Program

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Jt Tension	SF Body Tension
17.5"	0'	430'	13.375"	48	H40	STC	3.91	8.79	15.60	26.21
12.25"	0'	3452'	9.625"	36	J55	LTC	1.13	1.96	3.31	4.12
12.25"	3452'	3765'	9.625"	40	L80	LTC	1.58	2.94	58.07	73.16
8.75"	0'	9152'	7"	26	P110	LTC	1.54	2.46	2.69	3.49
6.125"	8410'	18122'	4.5"	13.5	P110	LTC	2.24	2.60	2.58	3.22
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet	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

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? 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 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?	Y
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
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?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/ sk	500# Comp. Strength (hours)	Slurry Description
Surf.	160	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Inter. Stg	590	12.5	2.12	11	10	Lead: Class C + Salt + Gel + Extender + LCM
	200	14.8	1.34	6.3	8	Tail: Class C + Retarder
Prod. Stg	275	12.5	2.12	11	9	Lead: Class C + Gel + Retarder + Defoamer + Extender
	400	15.6	1.18	5.2	10	Tail: Class H + Retarder + Fluid Loss + Defoamer
Liner	390	11.2	2.97	18	16	Class C + Salt + Gel + Fluid Loss + Retarder + Dispersant + Defoamer + Anti-Settling Agent

A copy of cement test will be available on location at time of cement job providing pump times & compressive strengths.

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	25%
Production	3565'	25%
Liner	8410'	25%

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
12-1/4"	13-5/8"	5M	Annular	X	2,500#
			Blind Ram	X	5,000#
			Pipe Ram	X	
			Double Ram		
			Other*		

*Specify if additional ram is utilized.

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.
Y	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?
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. • Provide description here: See attached schematic.

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

5. Mud Program

TVD		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	430	FW Gel	8.6-8.8	28-34	N/C
430	3675	Saturated Brine	10.0	28-34	N/C
3675	8190	Cut Brine	8.6-9.5	28-34	N/C
8190	8339	OBM	10.0-11.0	30-40	<10cc

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?	Pason/PVT/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing.	
X	Will run GR/CNL from KOP (8,410') 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? If yes, explain
	Coring? If yes, explain

Additional logs planned		Interval
X	Gamma Ray	8,410' (KOP) to TD
	Density	
	CBL	
	Mud log	
	PEX	

Mewbourne Oil Company, Phoenix 21/22 B2KI Fed Com #1H
Sec 21, 22, 28, & 29, T18S, R30E
SL: 720' FNL & 270' FEL (Sec 29)
BHL: 1980' FSL & 100' FEL (Sec 22)

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4770 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers in surface hole. Weighted mud for possible over-pressure in Wolfcamp formation.

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.	
	H2S is present
X	H2S Plan attached

8. Other facets of operation

Is this a walking operation? If yes, describe.
Will be pre-setting casing? If yes, describe.

Attachments
___ Directional Plan
___ Other, describe

APD ID: 10400038941 **Submission Date:** 02/12/2019

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Phoenix21_22B2K1FedCom1H_existingroadmap_20190207144028.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT **Row(s) Exist?** NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Phoenix21_22B2K1FedCom1H_newroadmap_20190207144046.pdf

New road type: RESOURCE

Length: 214.61 Feet **Width (ft.):** 20

Max slope (%): 3 **Max grade (%):** 3

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: none

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Turnout? Y

Access surfacing type: OTHER

Access topsoil source: BOTH

Access surfacing type description: Caliche

Access onsite topsoil source depth: 3

Offsite topsoil source description: stockpiled onsite & on edge of location

Onsite topsoil removal process: blade

Access other construction information:

Access miscellaneous information:

Number of access turnouts: 1 **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: None

Road Drainage Control Structures (DCS) description: none

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Phoenix21_22B2K1FedCom1H_existingwellmap_20190207144122.pdf

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Battery onsite - will be on south side.

Production Facilities map:

Phoenix21_22B2K1FedCom1H_productionfacilitymap_20190207144159.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Water source type: IRRIGATION

Water source use type: SURFACE CASING
STIMULATION
DUST CONTROL
INTERMEDIATE/PRODUCTION CASING

Source latitude: 32.715904 **Source longitude:** -103.99288

Source datum: NAD83

Water source permit type: WATER WELL

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: FEDERAL

Water source volume (barrels): 1940 **Source volume (acre-feet):** 0.2500526

Source volume (gal): 81480

Water source and transportation map:

Phoenix21_22B2K1FedCom1H_watersourceandtransmap_20190207144344.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: Caliche - BOTH SOURCES SHOWN ON ONE MAP

Construction Materials source location attachment:

Phoenix21_22B2K1FedCom1H_calichesourceandtransmap_20190207144358.pdf

Section 7 - Methods for Handling Waste

Waste type: SEWAGE

Waste content description: Human waste & grey water

Amount of waste: 1500 gallons

Waste disposal frequency : Weekly

Safe containment description: 2,000 gallon plastic container

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL **Disposal location ownership:** PRIVATE FACILITY

Disposal type description:

Disposal location description: City of Carlsbad Water Treatment facility

Waste type: GARBAGE

Waste content description: Garbage & trash

Amount of waste: 1500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Enclosed trash trailer

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL **Disposal location ownership:** PRIVATE FACILITY

Disposal type description:

Disposal location description: Waste Management facility in Carlsbad.

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Waste type: DRILLING

Waste content description: Drill cuttings

Amount of waste: 940 barrels

Waste disposal frequency : One Time Only

Safe containment description: Drill cuttings will be properly contained in steel tanks (20 yard roll off bins.)

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: NMOCD approved waste disposal locations are CRI or Lea Land, both facilities are located on HWY 62/180, Sec. 27 T20S R32E.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Phoenix21_22B2K1FedCom1H_wellsitelayout_20190207144419.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name:

Multiple Well Pad Number:

Recontouring attachment:

Drainage/Erosion control construction: None

Drainage/Erosion control reclamation: None

Well pad proposed disturbance (acres): 3.5	**Well pad interim reclamation (acres):** 0.733	**Well pad long term disturbance (acres):** 2.767
Road proposed disturbance (acres): 0.15	**Road interim reclamation (acres):** 0	**Road long term disturbance (acres):** 0
Powerline proposed disturbance (acres): 0	**Powerline interim reclamation (acres):** 0	**Powerline long term disturbance (acres):** 0
Pipeline proposed disturbance (acres): 0	**Pipeline interim reclamation (acres):** 0	**Pipeline long term disturbance (acres):** 0
Other proposed disturbance (acres): 0	**Other interim reclamation (acres):** 0	**Other long term disturbance (acres):** 0
Total proposed disturbance: 3.65	**Total interim reclamation:** 0.733	**Total long term disturbance:** 2.767

Disturbance Comments: In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging.

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used.

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Soil treatment: NA

Existing Vegetation at the well pad: Various brush & grasses

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Various brush & grasses

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: NA

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: NA

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed Summary	
Seed Type	**Pounds/Acre**

Total pounds/Acre:

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: **Last Name:**

Phone: (575)393-5905 **Email:** bbishop@mewbourne.com

Seedbed prep: Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.
Seed BMP: To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used.

Seed method: drilling or broadcasting seed over entire reclaimed area.

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: NA

Weed treatment plan attachment:

Monitoring plan description: vii. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion and invasive/noxious weeds are controlled.
Monitoring plan attachment:

Success standards: regrowth within 1 full growing season of reclamation.

Pit closure description: NA

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Disturbance type: EXISTING ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Section 12 - Other Information

Right of Way needed? NO **Use APD as ROW?**

ROW Type(s):

ROW Applications

SUPO Additional Information: NONE

Use a previously conducted onsite? YES

Previous Onsite information: MAR 23 2017 Met with Brooke Wilson, Cassie Brooke (BLM) & RRC Surveying & staked location @ 1980' FSL & 800' FWL, Sec 21, T18S, R30E, Eddy Co. NM. This location was unacceptable due to Habitat Evaluation Area in Sections 21, 20, 22, & 23. Moved location to 720' FNL and 270' FEL, Section 29, T18S, R30E, Eddy Co. NM (Elevation @ 3415'). This appears to be a drillable location with pit area to the E. Topsoil will be 30' wide on W. Reclaim 60' N & 60' W. Battery will be on S side. This will be a 340' x 450' pad w/berms. Road off NE corner heading E. MOC electric line 400' E. Location in BLM MOA. Will share location with Phoenix 21/22 B2NP Fed Com #1H staked 50' S. (BPS)

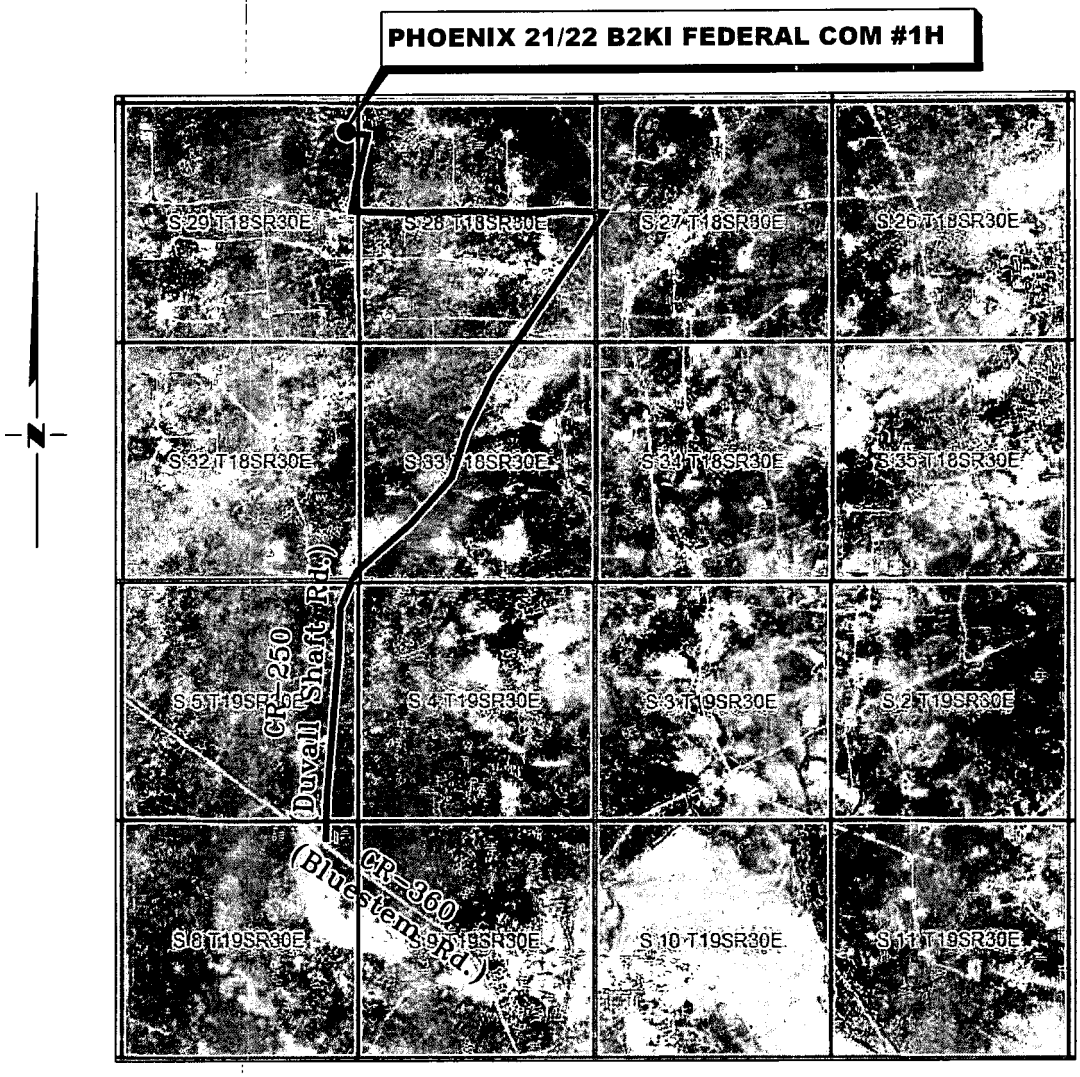
Other SUPO Attachment

Phoenix21_22B2K1FedCom1H_interimreclamationdiagram_20190207144700.pdf

Phoenix21_22B2K1FedCom1H_gascaptureplan_20190207144710.pdf

VICINITY MAP

NOT TO SCALE



SECTION 29, TWP. 18 SOUTH, RGE. 30 EAST,
N. M. P. M., EDDY CO., NEW MEXICO

OPERATOR: Mewbourne Oil Company
LEASE: Phoenix 21/22 B2KI Federal Com
WELL NO.: 1H

LOCATION: 720' FNL & 270' FEL
ELEVATION: 3415'

NO.	REVISION	DATE

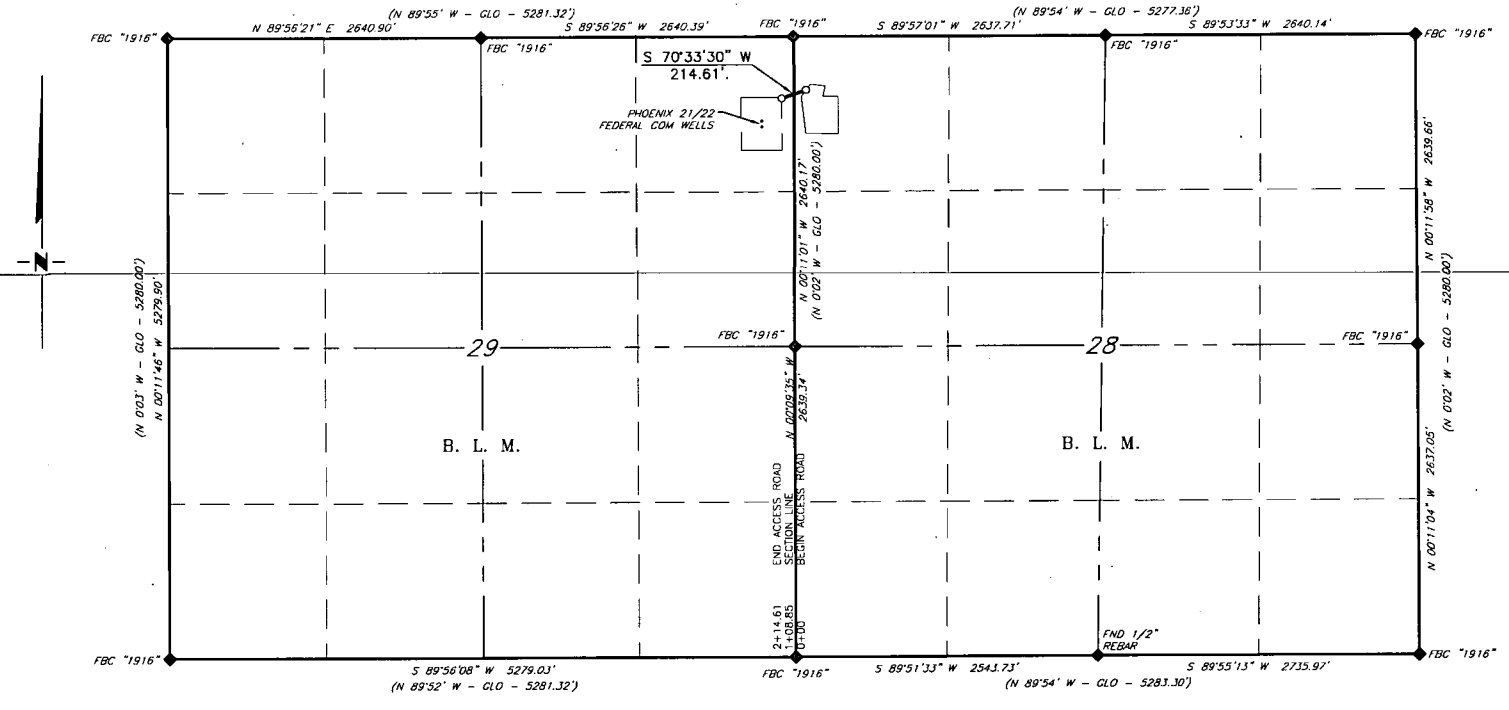
JOB NO.: LS1701035
DWG. NO.: 1701035VM

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S.
DATE: 3-23-2017
SURVEYED BY: ML/AB
DRAWN BY: LPS
APPROVED BY: RMH
SHEET: 1 OF 1

MEWBOURNE OIL COMPANY
OVERALL SURVEY OF A PROPOSED ROAD
FOR THE PHOENIX 21/22 FEDERAL COM WELL LOCATIONS
SECTIONS 28 & 29, T18S, R30E,
N. M. P. M., EDDY CO., NEW MEXICO



SCALE: 1" = 1200'
0 600 1200

BEARINGS ARE GRID NAD 27
NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA - GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED ACCESS ROAD

Firm No.: TX 10193838 NM 4655451

NO.	REVISION	DATE

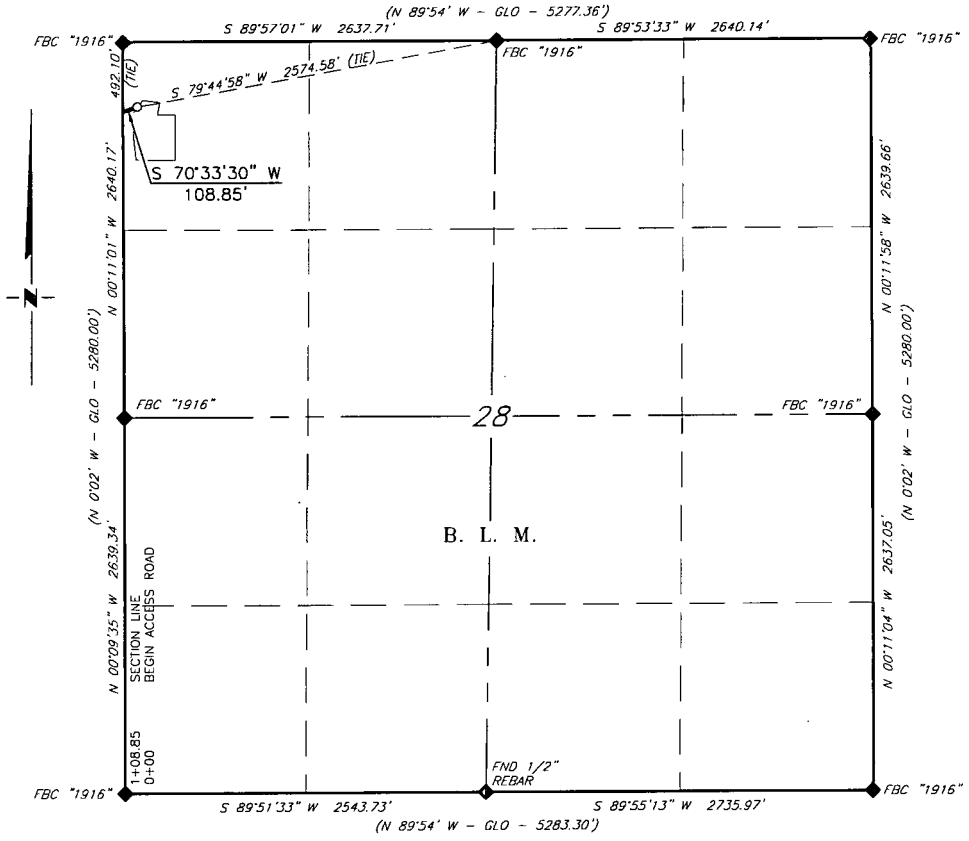
JOB NO.: LS1701035
DWG. NO.: 1701035RD1

SCALE: 1" = 1200'
DATE: 3-23-2017
SURVEYED BY: ML/AB
DRAWN BY: LPS
APPROVED BY: RMH
SHEET: 1 OF 3

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

MEWBOURNE OIL COMPANY
SURVEY OF A PROPOSED ROAD
FOR THE PHOENIX 21/22 FEDERAL COM WELL LOCATIONS
SECTION 28, T18S, R30E,
N. M. P. M., EDDY CO., NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 108.85 feet or 6.597 rods in length, lying in Section 28, Township 18 South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Northwest quarter of Section 28, which bears, S 79°44'58" W, 2,574.58 feet, from a brass cap, stamped "1916", found for the North quarter corner of Section 28.

Thence S 70°33'30" W, 108.85 feet, to Engr. Sta. 1+08.85, a point on the West line of Section 28, which bears, S 00°11'01" E, 492.10 feet, from a brass cap, stamped "1916", found for the Northwest corner of Section 28.

Said strip of land contains 0.075 acres, more or less, and is allocated by forties as follows:

NW 1/4 NW 1/4 6.597 Rods 0.075 Acres

SCALE: 1" = 1000'
0 500' 1000'

BEARINGS ARE GRID NAD 27 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND

( ) RECORD DATA - GLO

◆ FOUND MONUMENT AS NOTED

PROPOSED ACCESS ROAD

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT
NEW MEXICO
19680
3/29/17
PROFESSIONAL SURVEYOR

Firm No.: TX 10193838 NM 4655451

NO.	REVISION	DATE

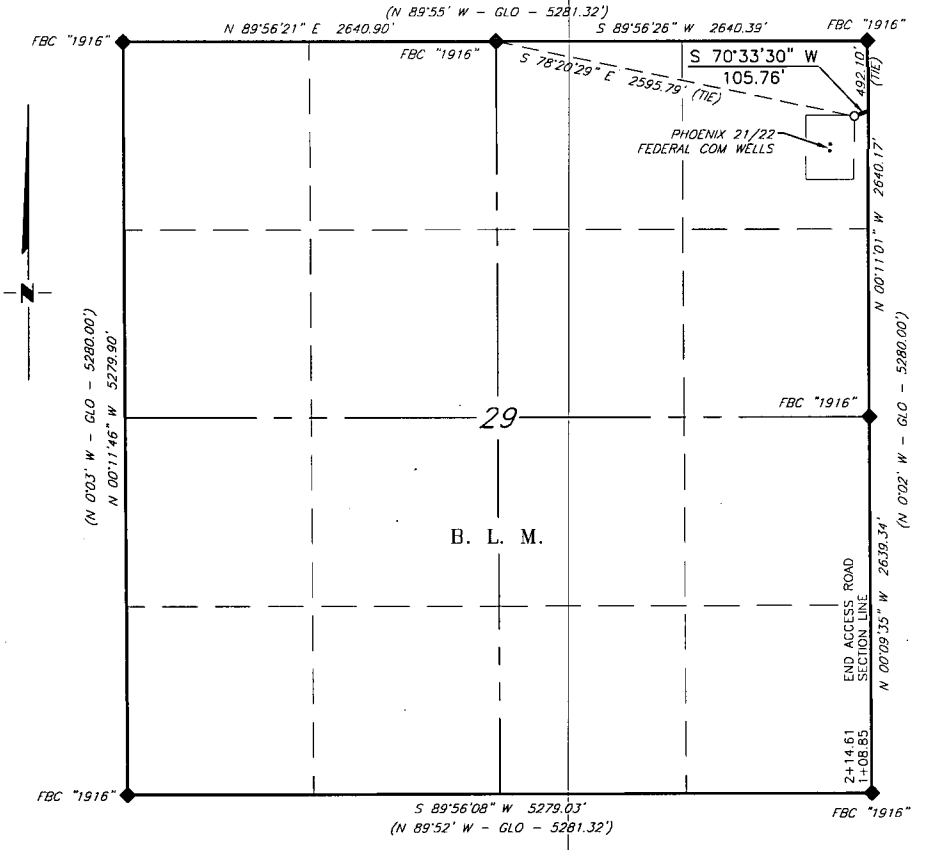
JOB NO.: LS1701035
DWG. NO.: 1701035RD2

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 3-23-2017
SURVEYED BY: ML/AB
DRAWN BY: LPS
APPROVED BY: RMH
SHEET: 2 OF 3

MEWBOURNE OIL COMPANY
SURVEY OF A PROPOSED ROAD
FOR THE PHOENIX 21/22 FEDERAL COM WELL LOCATIONS
SECTION 29, T18S, R30E,
N. M. P. M., EDDY CO., NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 105.76 feet or 6.410 rods in length, lying in Section 29, Township 18 South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 1+08.85, a point on the East line of Section 29, which bears, S 00°11'01" E, 492.10 feet, from a brass cap, stamped "1916", found for the Northeast corner of Section 29.

Thence S 70°33'30" W, 105.76 feet, to Engr. Sta. 2+14.61, the End of Survey, a point in the Northeast quarter of Section 29, which bears, S 78°20'29" E, 2,595.79 feet, from a brass cap, stamped "1916", found for the North quarter corner of Section 29.

Said strip of land contains 0.073 acres, more or less, and is allocated by forties as follows:

NE 1/4 NE 1/4	6.410 Rods	0.073 Acres

SCALE: 1" = 1000'
0 500' 1000'

BEARINGS ARE GRID NAD 27 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA - GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED ACCESS ROAD

Firm No.: TX 10193838 NM 4655451

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT
NEW MEXICO
19680
3/29/17
PROFESSIONAL SURVEYOR

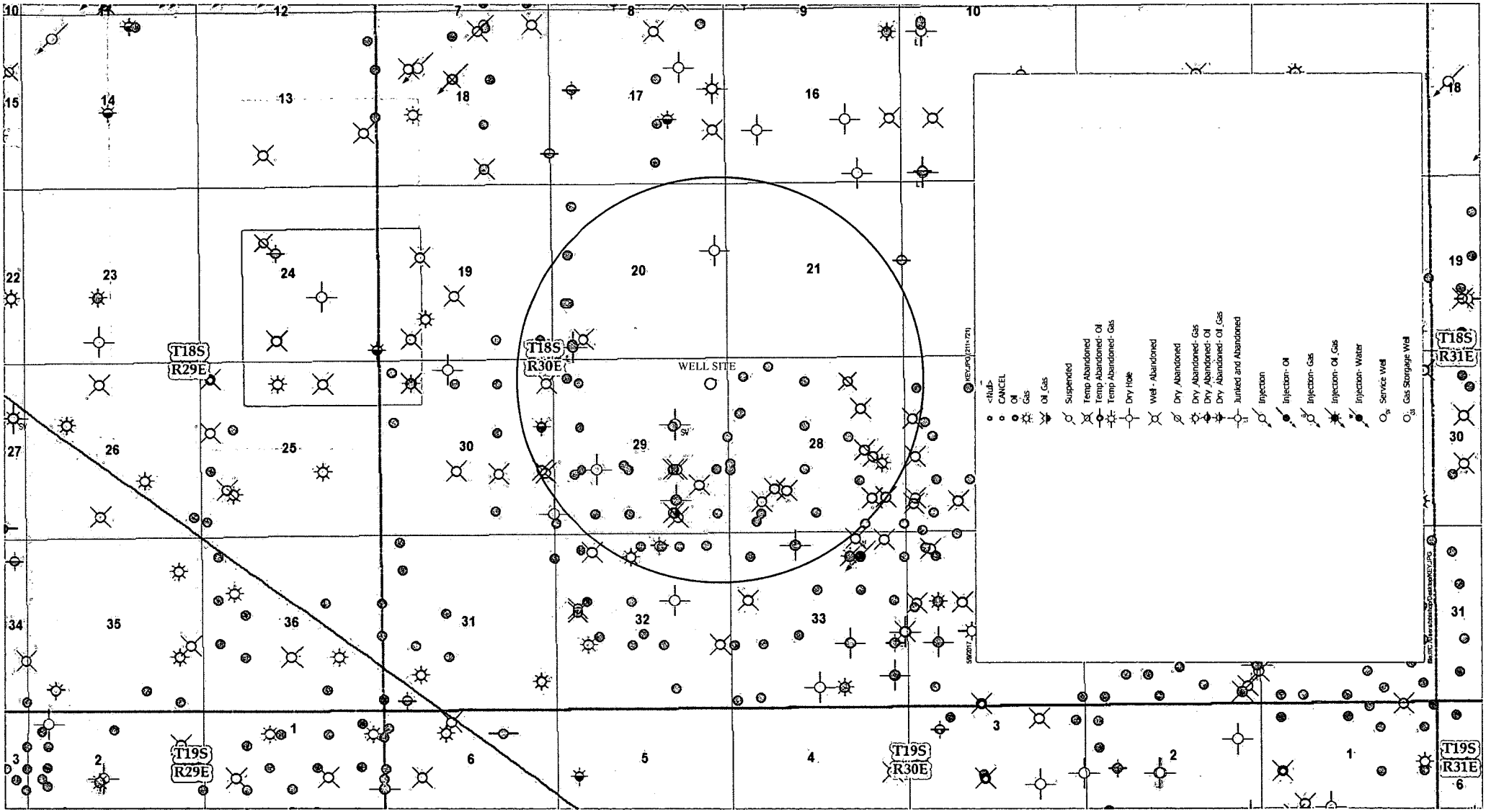
NO.	REVISION	DATE

JOB NO.: LS1701035
DWG. NO.: 1701035RD3

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 3-23-2017
SURVEYED BY: ML/AB
DRAWN BY: LPS
APPROVED BY: RMH
SHEET: 3 OF 3


WELL SITE
T18S
R29E
T18S
R30E
T18S
R31E
T19S
R29E
T19S
R30E
T19S
R31E
<Null>
CANCEL
Oil
Gas
Oil_Gas
Suspended
Temp Abandoned
Temp Abandoned- Oil
Temp Abandoned- Gas
Dry Hole
Well - Abandoned
Dry Abandoned
Dry Abandoned- Gas
Dry Abandoned- Oil
Dry Abandoned- Oil_Gas
Junked and Abandoned
Injection
Injection- Oil
Injection- Gas
Injection- Oil_Gas
Injection- Water
Service Well
Gas Storage Well

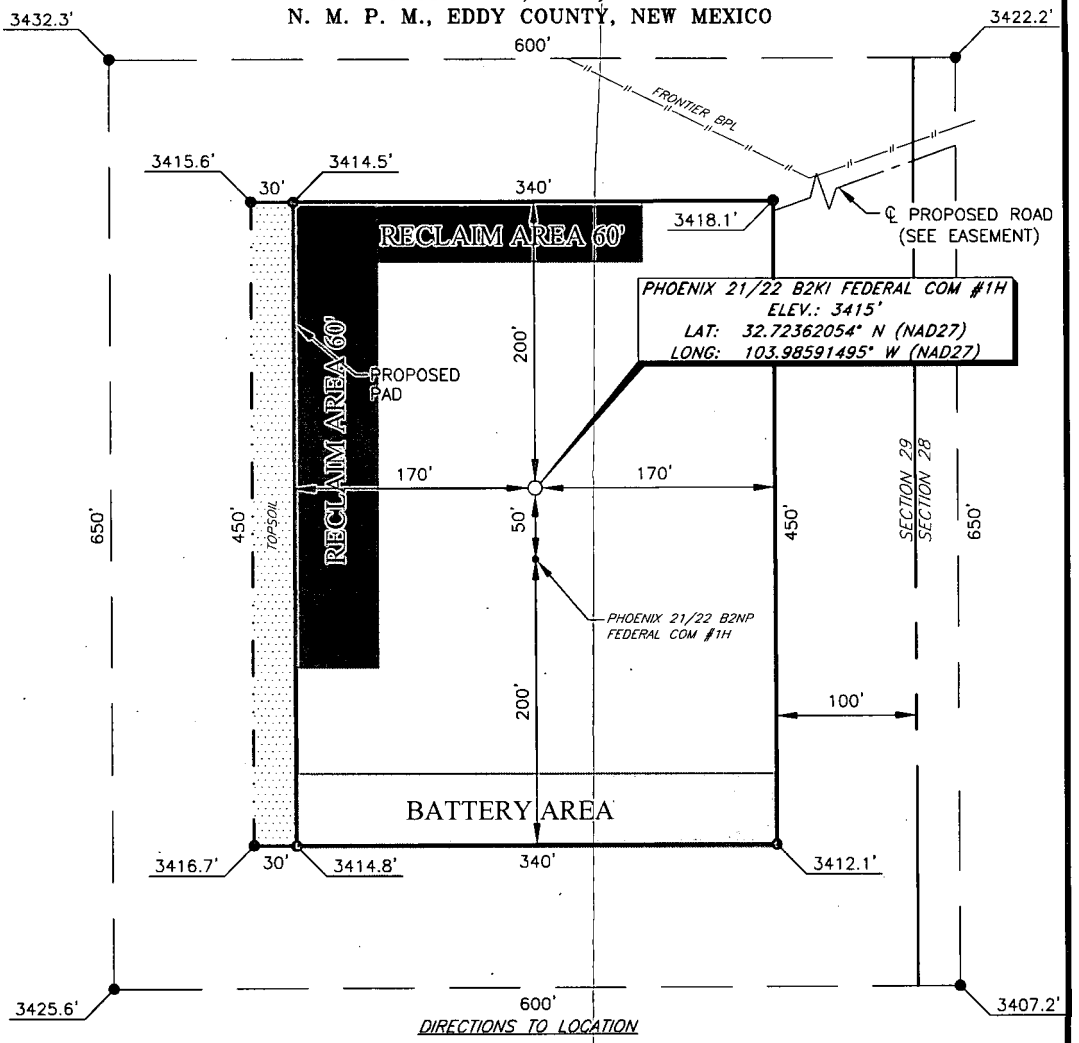
MEWBOURNE OIL COMPANY

PHOENIX 21/22 B2KI FEDERAL COM #1H

(720' FNL & 270' FEL)

SECTION 29, T18S, R30E

N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of CR-360 (Bluestem Rd.) and CR-250 (Duvall Shaft Rd.);

Go Northeast on CR-250 approx. 3.0 miles to a lease road on the left;

Turn left and go West approx. 1.1 miles to a lease road on the right;

Turn right and go Northeast approx. 0.4 miles to a proposed road on the Northwest corner of an existing well pad;

Turn right and go West on the proposed road approx. 385 feet to location on the left.

N

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 27 GRID - NM EAST
DISTANCES ARE GROUND

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA IS SHOWN FROM A PREVIOUS SURVEY REFERENCED HEREON.

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT
NEW MEXICO
19680
3/28/17
PROFESSIONAL SURVEYOR

Firm No.: TX 10193838 NM 4655451

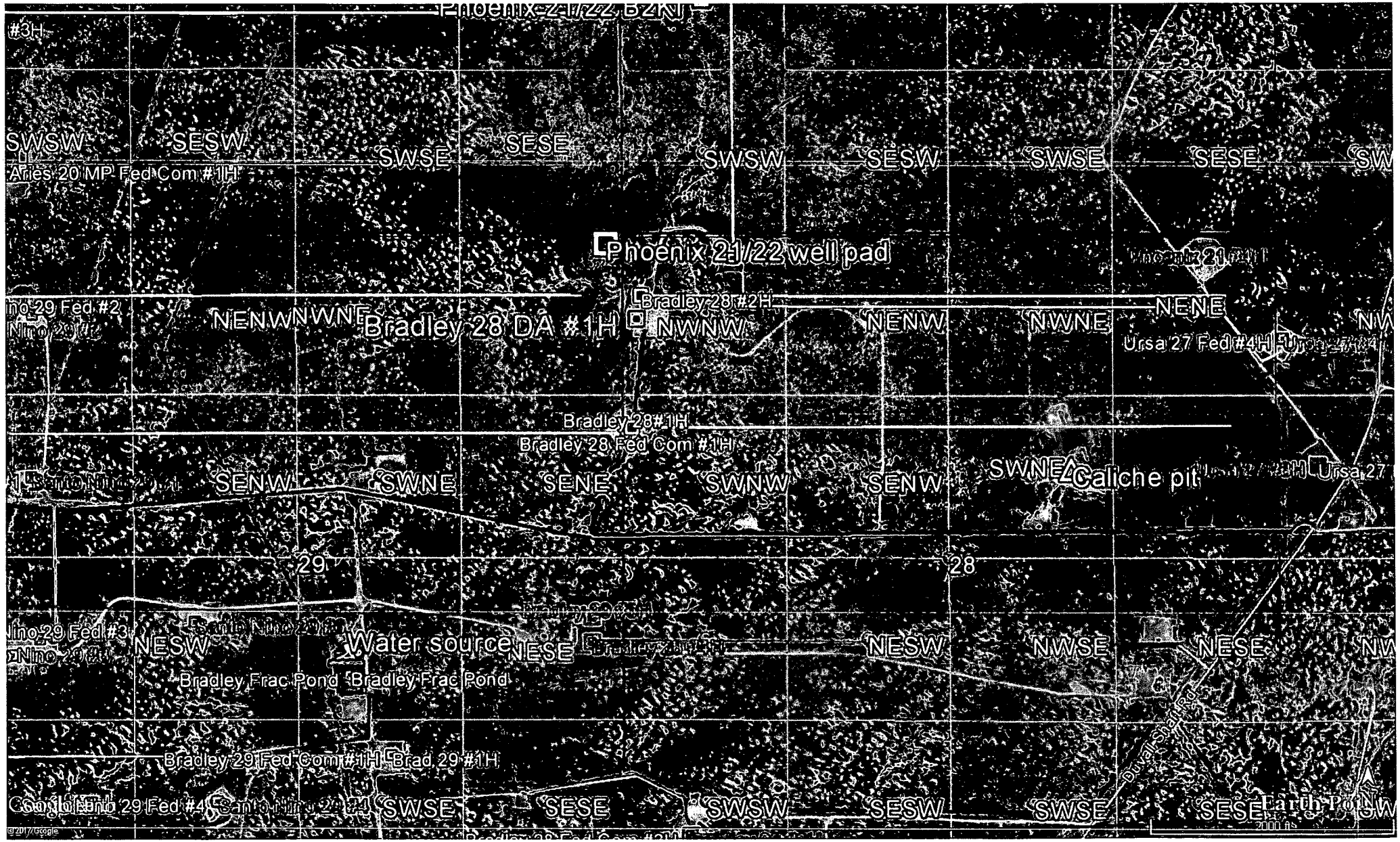
NO.	REVISION	DATE

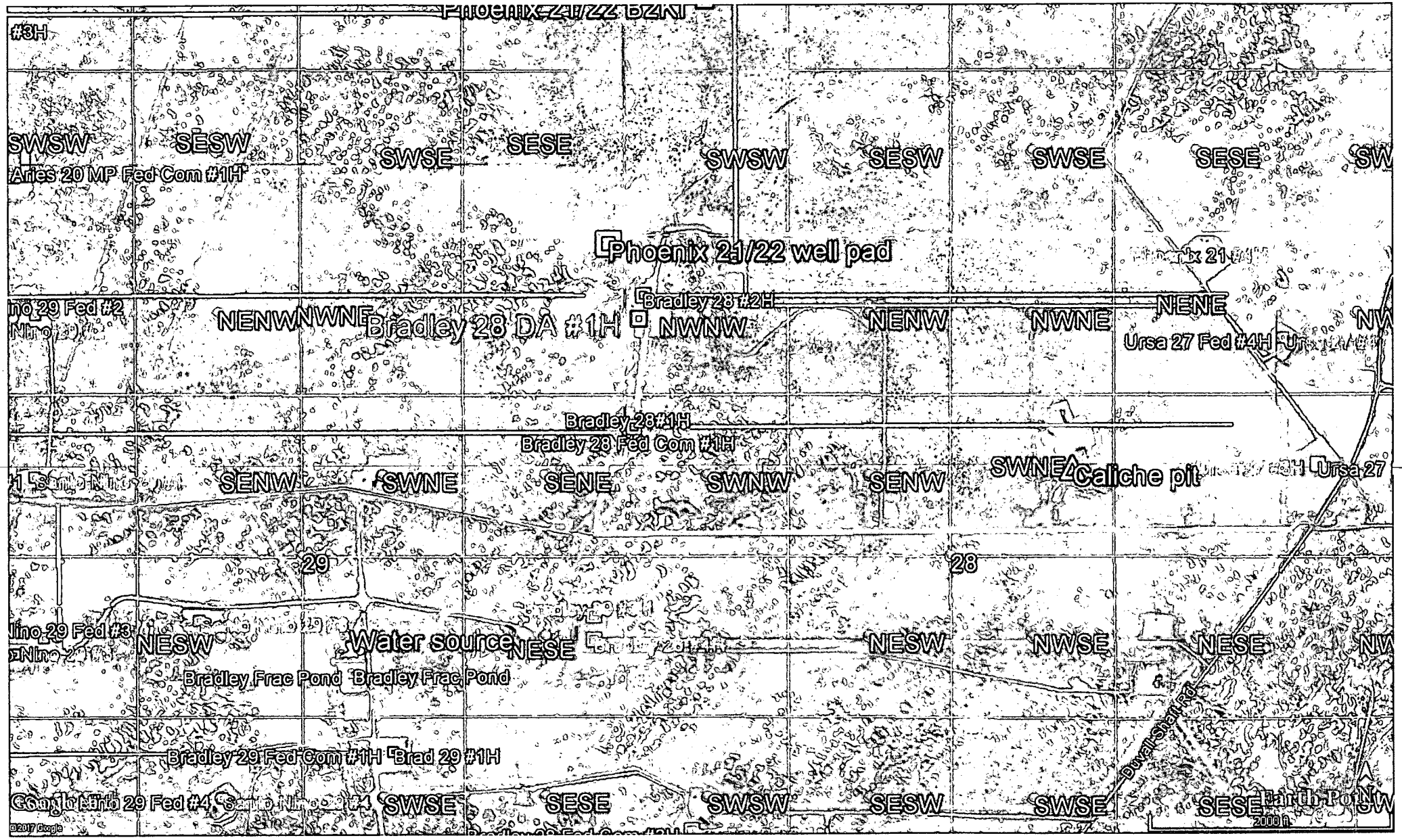
JOB NO.: LS1701035
DWG. NO.: 1701035PAD

RRC

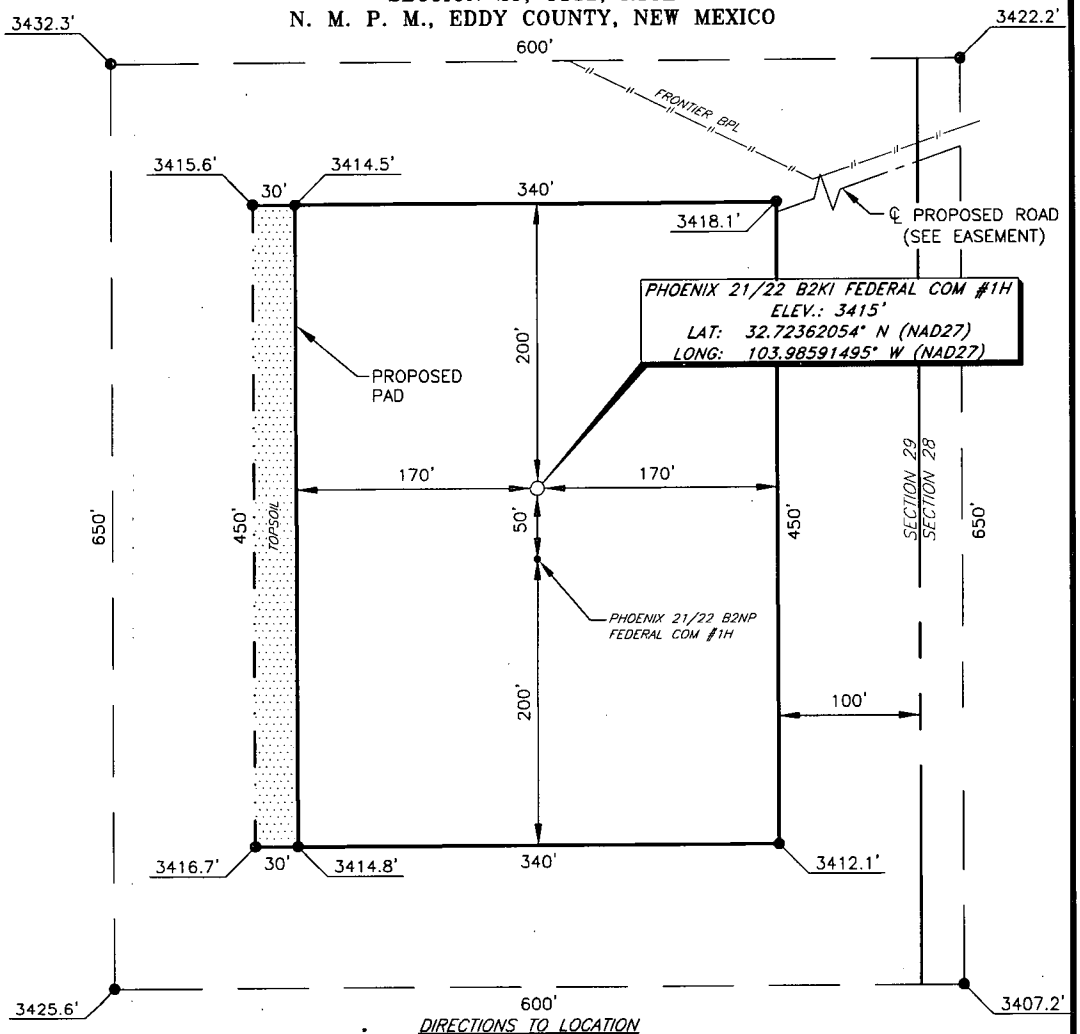
308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'
DATE: 3-23-2017
SURVEYED BY: ML/AB
DRAWN BY: LPS
APPROVED BY: RMH
SHEET: 1 OF 1


Phoenix 21/22 B2NJ
#3H
SWSW
SESW
SWSE
SESE
SWSW
SESW
SWSE
SESE
Aries 20 MP Fed Com #1H
Phoenix 21/22 well pad
Bradley 28 #2H
Bradley 28 DA #1H
NENW
NWNW
NENW
NWNE
NENE
Ursa 27 Fed #4H
Bradley 28#1H
Bradley 28 Fed Com #1H
SENW
SWNE
SENE
SWNW
SENW
SWNE
Caliche pit
29
28
NESW
Water source
NESE
NESW
NWSE
NESE
Bradley Frac Pond
Bradley Frac Pond
Bradley 29 Fed Com #1H
Brad 29 #1H
SWSE
SESE
SWSW
SESW
SWSE
SESE
Earth Pot
2000 ft
©2017 Google


#3H
SWSW
SESW
SWSE
SESE
SWSW
SESW
SWSE
SESE
Aries 20 MP Fed Com #1H
Phoenix 21/22 well pad
Tx 21
Bradley 28 #2H
NENW
NWNE
NENE
Ursa 27 Fed #4H
NENWNWNE
Bradley 28 DA #1H
NWNW
Bradley 28 #1H
Bradley 28 Fed Com #1H
SENW
SWNE
SENE
SWNW
SENW
SWNE
Caliche pit
Ursa 27
29
28
NESW
Water source
NESE
NESW
NWSE
NESE
Bradley Frac Pond
Bradley Frac Pond
Bradley 29 Fed Com #1H
Brad 29 #1H
SWSE
SESE
SWSW
SESW
SWSE
SESE
Powell-Shell Rd
2000 ft

MEWBOURNE OIL COMPANY
PHOENIX 21/22 B2KI FEDERAL COM #1H
(720' FNL & 270' FEL)
SECTION 29, T18S, R30E
N. M. P. M., EDDY COUNTY, NEW MEXICO



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NEW MEXICO
19680
3/28/17
PROFESSIONAL SURVEYOR

Firm No.: TX 10193838 NM 4655451

NO.	REVISION	DATE

JOB NO.: LS1701035
DWG. NO.: 1701035PAD

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'
DATE: 3-23-2017
SURVEYED BY: ML/AB
DRAWN BY: LPS
APPROVED BY: RMH
SHEET: 1 OF 1

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

PWD Data Report

03/05/2020

APD ID: 10400038941 **Submission Date:** 02/12/2019

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): **PWD surface owner:**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM **Well Number:** 1H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Bond Info Data Report

03/05/2020

APD ID: 10400038941

Submission Date: 02/12/2019

Operator Name: MEWBOURNE OIL COMPANY

Well Name: PHOENIX 21/22 B2KI FED COM

Well Number: 1H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Bond Information

Federal/Indian APD: FED

BLM Bond number: NM1693

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: