

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011
Permit 273417

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address CHISHOLM ENERGY OPERATING, LLC 801 Cherry Street Fort Worth, TX 76102		2. OGRID Number 372137
4. Property Code 326235		3. API Number 30-025-46472
5. Property Name OUTLAND WCA STATE UNIT 11 2		6. Well No. 005H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	11	21S	34E	O	125	S	1685	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	2	21S	34E	I	2500	S	1310	E	Lea

9. Pool Information

WC-025 G-09 S2134110;UPR WOLF CAMP	98317
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3672
16. Multiple N	17. Proposed Depth 18176	18. Formation Wolfcamp	19. Contractor	20. Spud Date 11/15/2019
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1700	1355	0
Int1	12.25	9.625	40	10300	3004	0
Prod	8.75	5.5	20	18176	1695	4000

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	CACTUS
Annular	2500	2500	CACTUS
Pipe	5000	5000	CACTUS

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable. Signature:	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by Jennifer Elrod	Approved By: Paul F Kautz
Title: Sr. Regulatory Tech	Title: Geologist
Email Address: jelrod@chisholmenergy.com	Approved Date: 10/29/2019 Expiration Date: 10/29/2021
Date: 10/18/2019 Phone: 817-953-3728	Conditions of Approval Attached

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Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-46472	² Pool Code 28452	³ Pool Name GRAMA RIDGE; WOLFCAMP
⁴ Property Code 326235	⁵ Property Name OUTLAND WCA STATE UNIT 11-2	⁶ Well Number 5H
⁷ OGRID No. 372137	⁸ Operator Name CHISHOLM ENERGY OPERATING, LLC	⁹ Elevation 3671.8

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	11	21 S	34 E		125	SOUTH	1685	EAST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	2	21 S	34 E		2500	SOUTH	1310	EAST	LEA

¹² Dedicated Acres 240	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

LANDING POINT & FTP 100' FSL, 1310' FEL LAT. = 32.4865547°N LONG. = 103.4363286°W N = 541902.35 E = 817924.70 GRID AZ. TO LP S86°47'01"E HORIZ. DIST 375.86 FT OUTLAND WCA STATE UNIT 11-2 5H 125' FSL, 1685' FEL ELEV. = 3671.8' LAT. = 32.4866213°N (NAD83) LONG. = 103.4375446°W NMSP EAST (FT) N = 541923.43 E = 817549.53 BOTTOM OF HOLE 2500' FSL, 1310' FEL LAT. = 32.5076603°N LONG. = 103.4363279°W NMSP EAST (FT) N = 549580.88 E = 817860.31 1310' BHL/LTP 2500' SHL/KOP 125' HORIZ. DIST = 7680.32 FT	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Jennifer Elrod</i> 10/15/2019 Signature Date JENNIFER ELROD Printed Name JELROD@CHISHOLMENERGY.COM E-mail Address ¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. OCTOBER 15, 2019 Date of Survey <i>William F. Jaramila</i> Signature and Seal of Professional Surveyor Certificate Number: 12797 Survey No. 7594A
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Intent ☒ As Drilled ☐

API #

Operator Name:	Property Name:	Well Number
CHISHOLM ENERGY OPERATING, LLC	OUTLAND STATE UNIT 11-2 WCA	5H

Kick Off Point (KOP)

UL O	Section 11	Township 21S	Range 34E	Lot	Feet 125	From N/S SOUTH	Feet 1685	From E/W EAST	County LEA
Latitude 32.4866213					Longitude 103.4375446			NAD 83	

First Take Point (FTP)

UL P	Section 11	Township 21S	Range 34E	Lot	Feet 100	From N/S SOUTH	Feet 1310	From E/W EAST	County LEA
Latitude 32.4865547					Longitude 103.4363286			NAD 83	

Last Take Point (LTP)

UL I	Section 2	Township 21S	Range 34E	Lot	Feet 2500	From N/S SOUTH	Feet 1310	From E/W EAST	County LEA
Latitude 32.5076603					Longitude 103.4363279			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☐ YES

Is this well an infill well? ☐

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

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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 10/29/2019

☒ Original Operator & OGRID No.: [372137] CHISHOLM ENERGY OPERATING, LLC

☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
OUTLAND WCA STATE UNIT 11 2 #005H	30-025-46472	O-11-21S-34E	0125S 1685E	1200	Flared	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to 3BEAR FIELD SERVICES, LLC and will be connected to 3BEAR FIELD SERVICES, LLC Low Pressure gathering system located in Lea County, New Mexico. It will require 50' of pipeline to connect the facility to Low Pressure gathering system. CHISHOLM ENERGY OPERATING, LLC provides (periodically) to 3BEAR FIELD SERVICES, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, CHISHOLM ENERGY OPERATING, LLC and 3BEAR FIELD SERVICES, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at 3BEAR FIELD SERVICES, LLC Processing Plant located in Sec. 26, Twn. 20S, Rng. 34E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on 3BEAR FIELD SERVICES, LLC system at that time. Based on current information, it is CHISHOLM ENERGY OPERATING, LLC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments

Permit 273417

PERMIT COMMENTS

Operator Name and Address: CHISHOLM ENERGY OPERATING, LLC [372137] 801 Cherry Street Fort Worth, TX 76102		API Number: 30-025-46472
		Well: OUTLAND WCA STATE UNIT 11 2 #005H

Created By	Comment	Comment Date
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Form APD Conditions

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Permit 273417

PERMIT CONDITIONS OF APPROVAL

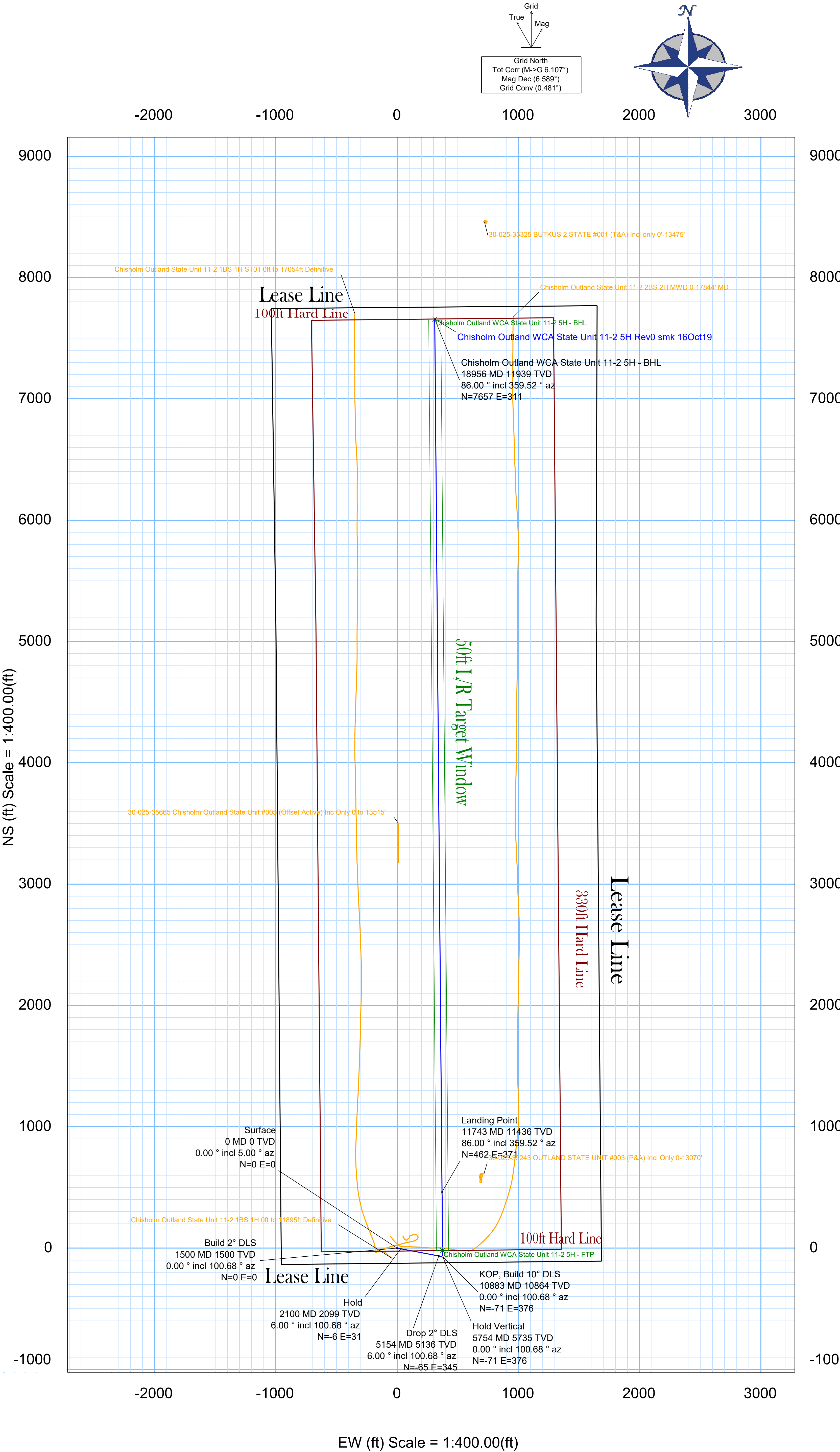
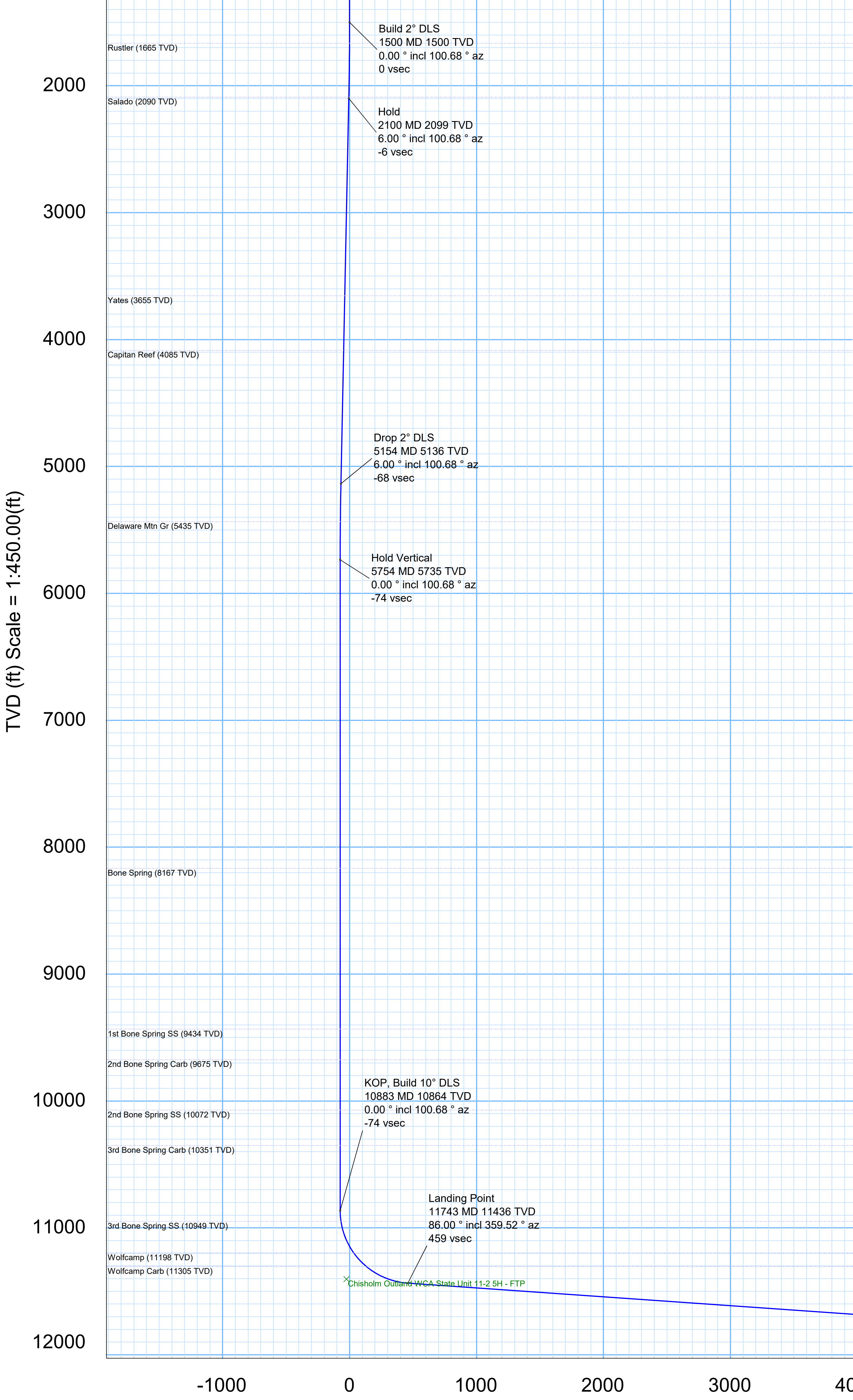
Operator Name and Address: CHISHOLM ENERGY OPERATING, LLC [372137] 801 Cherry Street Fort Worth, TX 76102	API Number: 30-025-46472
	Well: OUTLAND WCA STATE UNIT 11 2 #005H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	Will require a administrative order for non-standard location prior to placing the well on production.
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104
pkautz	It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD. If an APD expires and if site construction has occurred, site remediation is required.
pkautz	Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool at 5753703186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.

Borehole:	Well:	Field:	Structure:
Chisholm Outland WCA State Unit 11-2 5H	Original Hole	NM Lea County (NAD 83)	Chisholm Outland WCA State Unit 11-2 5H

Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model:	HDGM 2018	Dip:	60.34°	Date:	16-Oct-2019	Lat:	N 32 29 11.84	Northing:	541923.43ftUS	Grid Conv:	0.4812°
MagDec:	6.589°	FS:	47982.465nT	Gravity FS:	998.493mgn (9.80665 Based)	Lon:	W 103 26 15.16	Easting:	817549.53ftUS	Scale Fact:	0.99999647
								TVD Ref: KB = 31ft(3702.8ft above MSL)			
								Plan: Chisholm Outland WCA State Unit 11-2 5H Rev0 smk 16Oct19			

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
Surface	0.00	0.00	5.00	0.00	0.00	0.00	0.00	
Build 2° DLS	1500.00	0.00	100.68	1500.00	0.00	0.00	0.00	0.00
Rustler	1665.02	1.65	100.68	1665.00	-0.46	-0.44	2.34	1.00
Salado	2091.05	5.91	100.68	2090.00	-5.90	-5.65	29.93	1.00
Hold	2100.42	6.00	100.68	2099.32	-6.08	-5.83	30.89	1.00
Yates	3664.68	6.00	100.68	3655.00	-37.76	-36.15	191.68	0.00
Capitan Reef	4097.05	6.00	100.68	4085.00	-46.51	-44.53	236.12	0.00
Drop 2° DLS	5153.52	6.00	100.68	5135.68	-67.90	-65.01	344.71	0.00
Delaware Mtn Gr	5453.81	3.00	100.68	5435.00	-72.46	-69.38	367.88	1.00
Hold Vertical	5753.95	0.00	100.68	5735.00	-73.98	-70.84	375.60	1.00
Bone Spring	8185.95	0.00	100.68	8167.00	-73.98	-70.84	375.60	0.00
1st Bone Spring SS	9452.95	0.00	100.68	9434.00	-73.98	-70.84	375.60	0.00
2nd Bone Spring Carb	9693.95	0.00	100.68	9675.00	-73.98	-70.84	375.60	0.00
2nd Bone Spring SS	10090.95	0.00	100.68	10072.00	-73.98	-70.84	375.60	0.00
3rd Bone Spring Carb	10369.95	0.00	100.68	10351.00	-73.98	-70.84	375.60	0.00
KOP, Build 10° DLS	10882.95	0.00	100.68	10864.00	-73.98	-70.84	375.60	0.00
3rd Bone Spring SS	10968.26	8.53	359.52	10949.00	-67.64	-64.50	375.55	10.00
Wolfcamp	11239.52	35.66	359.52	11198.00	33.44	36.58	374.70	10.00
Wolfcamp Carb	11386.21	50.33	359.52	11305.00	133.19	136.32	373.86	10.00
Hold to TD	11742.92	86.00	359.52	11435.56	458.98	462.11	371.13	10.00
Chisholm Outland WCA State Unit 11-2 5H - BHL	18956.15	86.00	359.52	11939.00	7654.62	7657.49	310.78	0.00



Vertical Section (ft) Azim = 359.52° Scale = 1:450.00(ft) Origin = 0N/-S, 0E/-W

Chisholm Outland WCA State Unit 11-2 5H Rev0 smk 16Oct19 Proposal

Geodetic Report

(Def Plan)

Report Date: October 16, 2019 - 06:02 PM
Client: Chisholm
Field: NM Lea County (NAD 83)
Structure / Slot: Chisholm Outland WCA State Unit 11-2 5H / New Slot
Well: Chisholm Outland WCA State Unit 11-2 5H
Borehole: Chisholm Outland WCA State Unit 11-2 5H
UWI / API#: Unknown / Unknown
Survey Name: Chisholm Outland WCA State Unit 11-2 5H Rev0 smk 16Oct19
Survey Date: October 16, 2019
Tort / AHD / DDI / ERD Ratio: 98.006 ° / 8110.826 ft / 6.101 / 0.679
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 29' 11.83683", W 103° 26' 15.16045"
Location Grid N/E Y/X: N 541923.430 ftUS, E 817549.530 ftUS
CRS Grid Convergence Angle: 0.4812 °
Grid Scale Factor: 0.99999647
Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.520 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB = 31ft
TVD Reference Elevation: 3702.800 ft above MSL
Seabed / Ground Elevation: 3671.800 ft above MSL
Magnetic Declination: 6.589 °
Total Gravity Field Strength: 998.4925mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47982.465 nT
Magnetic Dip Angle: 60.340 °
Declination Date: October 16, 2019
Magnetic Declination Model: HDGM 2018
North Reference: Grid North
Grid Convergence Used: 0.4812 °
Total Corr Mag North->Grid North: 6.1075 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
Surface	0.00	0.00	5.00	0.00	0.00	0.00	0.00	N/A	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
Build 2" DLS	1500.00	0.00	100.68	1500.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
Hold	2100.42	6.00	100.68	2099.32	-6.08	-5.83	30.89	1.00	541917.60	817580.42	N 32 29 11.78	W 103 26 14.80
Drop 2" DLS	5153.52	6.00	100.68	5135.68	-67.90	-65.01	344.71	0.00	541858.42	817894.24	N 32 29 11.16	W 103 26 11.14
Hold Vertical	5753.95	0.00	100.68	5735.00	-73.98	-70.84	375.60	1.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
KOP, Build 10" DLS	10882.95	0.00	100.68	10864.00	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
Hold to TD	11742.92	86.00	359.52	11435.56	458.98	462.11	371.13	10.00	542385.54	817920.66	N 32 29 16.38	W 103 26 10.78
Chisholm Outland WCA State Unit 11-2 5H - BHL	18956.15	86.00	359.52	11939.00	7654.62	7657.49	310.78	0.00	549580.88	817860.31	N 32 30 27.58	W 103 26 10.78

Survey Type: Def Plan

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

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	31.000	1/100.000	30.000	30.000		NAL_MWD_1.0_DEG-Depth Only	Chisholm Outland WCA State Unit 11-2 5H / Chisholm Outland WCA State Unit 11-2 5H Rev0 smk
	1	31.000	18956.149	1/100.000	30.000	30.000		NAL_MWD_1.0_DEG	Chisholm Outland WCA State Unit 11-2 5H / Chisholm Outland WCA



Chisholm Outland WCA State Unit 11-2 5H Rev0 smk 16Oct19 Proposal

Geodetic Report

(Def Plan)



Report Date: October 16, 2019 - 06:02 PM
Client: Chisholm
Field: NM Lea County (NAD 83)
Structure / Slot: Chisholm Outland WCA State Unit 11-2 5H / New Slot
Well: Chisholm Outland WCA State Unit 11-2 5H
Borehole: Chisholm Outland WCA State Unit 11-2 5H
UWI / API#: Unknown / Unknown
Survey Name: Chisholm Outland WCA State Unit 11-2 5H Rev0 smk 16Oct19
Survey Date: October 16, 2019
Tort / AHD / DDI / ERD Ratio: 98.006 ° / 8110.826 ft / 6.101 / 0.679
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 29' 11.83683", W 103° 26' 15.16045"
Location Grid N/E Y/X: N 541923.430 ftUS, E 817549.530 ftUS
CRS Grid Convergence Angle: 0.4812 °
Grid Scale Factor: 0.99999647
Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.520 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB = 31ft
TVD Reference Elevation: 3702.800 ft above MSL
Seabed / Ground Elevation: 3671.800 ft above MSL
Magnetic Declination: 6.589 °
Total Gravity Field Strength: 998.4925mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47982.465 nT
Magnetic Dip Angle: 60.340 °
Declination Date: October 16, 2019
Magnetic Declination Model: HDGM 2018
North Reference: Grid North
Grid Convergence Used: 0.4812 °
Total Corr Mag North->Grid North: 6.1075 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	5.00	0.00	0.00	0.00	0.00	N/A	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	100.00	0.00	100.68	100.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	200.00	0.00	100.68	200.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	300.00	0.00	100.68	300.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	400.00	0.00	100.68	400.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	500.00	0.00	100.68	500.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	600.00	0.00	100.68	600.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	700.00	0.00	100.68	700.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	800.00	0.00	100.68	800.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	900.00	0.00	100.68	900.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	1000.00	0.00	100.68	1000.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	1100.00	0.00	100.68	1100.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	1200.00	0.00	100.68	1200.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	1300.00	0.00	100.68	1300.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	1400.00	0.00	100.68	1400.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
Build 2" DLS	1500.00	0.00	100.68	1500.00	0.00	0.00	0.00	0.00	541923.43	817549.53	N 32 29 11.84	W 103 26 15.16
	1600.00	1.00	100.68	1599.99	-0.17	-0.16	0.86	1.00	541923.27	817550.39	N 32 29 11.84	W 103 26 15.15
Rustler	1665.02	1.65	100.68	1665.00	-0.46	-0.44	2.34	1.00	541922.99	817551.87	N 32 29 11.83	W 103 26 15.13
	1700.00	2.00	100.68	1699.96	-0.68	-0.65	3.43	1.00	541922.78	817552.96	N 32 29 11.83	W 103 26 15.12
	1800.00	3.00	100.68	1799.86	-1.52	-1.46	7.72	1.00	541921.97	817557.25	N 32 29 11.82	W 103 26 15.07
	1900.00	4.00	100.68	1899.68	-2.70	-2.59	13.72	1.00	541920.84	817563.25	N 32 29 11.81	W 103 26 15.00
	2000.00	5.00	100.68	1999.37	-4.22	-4.04	21.43	1.00	541919.39	817570.95	N 32 29 11.80	W 103 26 14.91
Salado	2091.05	5.91	100.68	2090.00	-5.90	-5.65	29.93	1.00	541917.78	817579.46	N 32 29 11.78	W 103 26 14.81
	2100.00	6.00	100.68	2098.90	-6.08	-5.82	30.84	1.00	541917.61	817580.37	N 32 29 11.78	W 103 26 14.80
Hold	2100.42	6.00	100.68	2099.32	-6.08	-5.83	30.89	1.00	541917.60	817580.42	N 32 29 11.78	W 103 26 14.80
	2200.00	6.00	100.68	2198.36	-8.10	-7.76	41.12	0.00	541915.67	817590.65	N 32 29 11.76	W 103 26 14.68
	2300.00	6.00	100.68	2297.81	-10.12	-9.69	51.40	0.00	541913.74	817600.93	N 32 29 11.74	W 103 26 14.56
	2400.00	6.00	100.68	2397.26	-12.15	-11.63	61.68	0.00	541911.80	817611.21	N 32 29 11.72	W 103 26 14.44
	2500.00	6.00	100.68	2496.71	-14.17	-13.57	71.96	0.00	541909.86	817621.49	N 32 29 11.70	W 103 26 14.32
	2600.00	6.00	100.68	2596.16	-16.20	-15.51	82.24	0.00	541907.92	817631.77	N 32 29 11.68	W 103 26 14.20
	2700.00	6.00	100.68	2695.61	-18.22	-17.45	92.52	0.00	541905.98	817642.05	N 32 29 11.66	W 103 26 14.08
	2800.00	6.00	100.68	2795.06	-20.25	-19.39	102.80	0.00	541904.04	817652.33	N 32 29 11.64	W 103 26 13.96
	2900.00	6.00	100.68	2894.52	-22.27	-21.33	113.07	0.00	541902.10	817662.60	N 32 29 11.62	W 103 26 13.84
	3000.00	6.00	100.68	2993.97	-24.30	-23.27	123.35	0.00	541900.16	817672.88	N 32 29 11.60	W 103 26 13.72
	3100.00	6.00	100.68	3093.42	-26.32	-25.20	133.63	0.00	541898.23	817683.16	N 32 29 11.58	W 103 26 13.60
	3200.00	6.00	100.68	3192.87	-28.35	-27.14	143.91	0.00	541896.29	817693.44	N 32 29 11.56	W 103 26 13.48
	3300.00	6.00	100.68	3292.32	-30.37	-29.08	154.19	0.00	541894.35	817703.72	N 32 29 11.54	W 103 26 13.36
	3400.00	6.00	100.68	3391.77	-32.40	-31.02	164.47	0.00	541892.41	817714.00	N 32 29 11.52	W 103 26 13.24
	3500.00	6.00	100.68	3491.22	-34.42	-32.96	174.75	0.00	541890.47	817724.28	N 32 29 11.50	W 103 26 13.12
	3600.00	6.00	100.68	3590.68	-36.45	-34.90	185.03	0.00	541888.53	817734.56	N 32 29 11.48	W 103 26 13.00
Yates	3664.68	6.00	100.68	3655.00	-37.76	-36.15	191.68	0.00	541887.28	817741.20	N 32 29 11.46	W 103 26 12.93
	3700.00	6.00	100.68	3690.13	-38.47	-36.84	195.31	0.00	541886.59	817744.84	N 32 29 11.46	W 103 26 12.88
	3800.00	6.00	100.68	3789.58	-40.50	-38.77	205.59	0.00	541884.66	817755.11	N 32 29 11.44	W 103 26 12.76
	3900.00	6.00	100.68	3889.03	-42.52	-40.71	215.86	0.00	541882.72	817765.39	N 32 29 11.42	W 103 26 12.64
	4000.00	6.00	100.68	3988.48	-44.54	-42.65	226.14	0.00	541880.78	817775.67	N 32 29 11.40	W 103 26 12.52
Capitan Reef	4097.05	6.00	100.68	4085.00	-46.51	-44.53	236.12	0.00	541878.90	817785.65	N 32 29 11.38	W 103 26 12.41
	4100.00	6.00	100.68	4087.93	-46.57	-44.59	236.42	0.00	541878.84	817785.95	N 32 29 11.38	W 103 26 12.40
	4200.00	6.00	100.68	4187.38	-48.59	-46.53	246.70	0.00	541876.90	817796.23	N 32 29 11.36	W 103 26 12.29
	4300.00	6.00	100.68	4286.84	-50.62	-48.47	256.98	0.00	541874.96	817806.51	N 32 29 11.34	W 103 26 12.17
	4400.00	6.00	100.68	4386.29	-52.64	-50.41	267.26	0.00	541873.02	817816.79	N 32 29 11.32	W 103 26 12.05
	4500.00	6.00	100.68	4485.74	-54.67	-52.35	277.54	0.00	541871.09	817827.07	N 32 29 11.30	W 103 26 11.93
	4600.00	6.00	100.68	4585.19	-56.69	-54.28	287.82	0.00	541869.15	817837.35	N 32 29 11.28	W 103 26 11.81
	4700.00	6.00	100.68	4684.64	-58.72	-56.22	298.10	0.00	541867.21	817847.62	N 32 29 11.26	W 103 26 11.69
	4800.00	6.00	100.68	4784.09	-60.74	-58.16	308.37	0.00	541865.27	817857.90	N 32 29 11.24	W 103 26 11.57
	4900.00	6.00	100.68	4883.54	-62.77	-60.10	318.65	0.00	541863.33	817868.18	N 32 29 11.22	W 103 26 11.45
	5000.00	6.00	100.68	4983.00	-64.79	-62.04	328.93	0.00	541861.39	817878.46	N 32 29 11.20	W 103 26 11.33
	5100.00	6.00	100.68	5082.45	-66.82	-63.98	339.21	0.00	541859.45	817888.74	N 32 29 11.18	W 103 26 11.21
Drop 2" DLS	5153.52	6.00	100.68	5135.68	-67.90	-65.01	344.71	0.00	541858.42	817894.24	N 32 29 11.16	W 103 26 11.14
	5200.00	5.54	100.68	5181.92	-68.80	-65.88	349.31	1.00	541857.55	817898.83	N 32 29 11.16	W 103 26 11.09
	5300.00	4.54	100.68	5281.53	-70.51	-67.51	357.94	1.00	541855.92	817907.47	N 32 29 11.14	W 103 26 10.99
	5400.00	3.54	100.68	5381.28	-71.87	-68.81	364.86	1.00	541854.62	817914.39	N 32 29 11.13	W 103 26 10.91
Delaware Mtn Gr	5453.81	3.00	100.68	5435.00	-72.46	-69.38	367.88	1.00	541854.05	817917.40	N 32 29 11.12	W 103 26 10.87
	5500.00	2.54	100.68	5481.14	-72.89	-69.80	370.07	1.00	541853.63	817919.60	N 32 29 11.12	W 103 26 10.85
	5600.00	1.54	100.68	5581.07	-73.58	-70.46	373.57	1.00	541852.97	817923.10	N 32 29 11.11	W 103 26 10.81
	5700.00	0.54	100.68	5681.06	-73.93	-70.79	375.35	1.00	541852.64	817924.88	N 32 29 11.11	W 103 26 10.79
Hold Vertical	5753.95	0.00	100.68	5735.00	-73.98	-70.84	375.60	1.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	5800.00	0.00	100.68	5781.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	5900.00	0.00	100.68	5881.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	6000.00	0.00	100.68	5981.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	6100.00	0.00	100.68	6081.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	6200.00	0.00	100.68	6181.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	6300.00	0.00	100.68	6281.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	6400.00	0.00										

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6900.00	0.00	100.68	6881.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7000.00	0.00	100.68	6981.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7100.00	0.00	100.68	7081.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7200.00	0.00	100.68	7181.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7300.00	0.00	100.68	7281.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7400.00	0.00	100.68	7381.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7500.00	0.00	100.68	7481.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7600.00	0.00	100.68	7581.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7700.00	0.00	100.68	7681.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7800.00	0.00	100.68	7781.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	7900.00	0.00	100.68	7881.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8000.00	0.00	100.68	7981.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8100.00	0.00	100.68	8081.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
Bone Spring	8185.95	0.00	100.68	8167.00	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8200.00	0.00	100.68	8181.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8300.00	0.00	100.68	8281.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8400.00	0.00	100.68	8381.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8500.00	0.00	100.68	8481.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8600.00	0.00	100.68	8581.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8700.00	0.00	100.68	8681.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8800.00	0.00	100.68	8781.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	8900.00	0.00	100.68	8881.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9000.00	0.00	100.68	8981.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9100.00	0.00	100.68	9081.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9200.00	0.00	100.68	9181.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9300.00	0.00	100.68	9281.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9400.00	0.00	100.68	9381.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
1st Bone Spring SS	9452.95	0.00	100.68	9434.00	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9500.00	0.00	100.68	9481.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9600.00	0.00	100.68	9581.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
2nd Bone Spring Carb	9693.95	0.00	100.68	9675.00	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9700.00	0.00	100.68	9681.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9800.00	0.00	100.68	9781.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	9900.00	0.00	100.68	9881.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10000.00	0.00	100.68	9981.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
2nd Bone Spring SS	10090.95	0.00	100.68	10072.00	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10100.00	0.00	100.68	10081.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10200.00	0.00	100.68	10181.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10300.00	0.00	100.68	10281.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
3rd Bone Spring Carb	10369.95	0.00	100.68	10351.00	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10400.00	0.00	100.68	10381.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10500.00	0.00	100.68	10481.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10600.00	0.00	100.68	10581.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10700.00	0.00	100.68	10681.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10800.00	0.00	100.68	10781.05	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
KOP, Build 10° DLS	10882.95	0.00	100.68	10864.00	-73.98	-70.84	375.60	0.00	541852.59	817925.13	N 32 29 11.10	W 103 26 10.78
	10900.00	1.71	359.52	10881.05	-73.73	-70.59	375.60	10.00	541852.84	817925.13	N 32 29 11.11	W 103 26 10.78
3rd Bone Spring SS	10968.26	8.53	359.52	10949.00	-67.64	-64.50	375.55	10.00	541858.93	817925.07	N 32 29 11.17	W 103 26 10.78
	11000.00	11.71	359.52	10980.24	-62.07	-58.92	375.50	10.00	541864.51	817925.03	N 32 29 11.22	W 103 26 10.78
	11100.00	21.71	359.52	11075.90	-33.36	-30.22	375.26	10.00	541893.21	817924.79	N 32 29 11.51	W 103 26 10.78
	11200.00	31.71	359.52	11165.12	11.52	14.66	374.88	10.00	541938.09	817924.41	N 32 29 11.95	W 103 26 10.78
Wolfcamp	11239.52	35.66	359.52	11198.00	33.44	36.58	374.70	10.00	541960.01	817924.23	N 32 29 12.17	W 103 26 10.78
	11300.00	41.71	359.52	11245.19	71.22	74.36	374.38	10.00	541997.79	817923.91	N 32 29 12.54	W 103 26 10.78
Wolfcamp Carb	11386.21	50.33	359.52	11305.00	133.19	136.32	373.86	10.00	542059.75	817923.39	N 32 29 13.15	W 103 26 10.78
	11400.00	51.71	359.52	11313.68	143.91	147.05	373.77	10.00	542070.47	817923.30	N 32 29 13.26	W 103 26 10.78
	11500.00	61.71	359.52	11368.50	227.39	230.52	373.07	10.00	542153.95	817922.60	N 32 29 14.09	W 103 26 10.78
	11600.00	71.71	359.52	11408.00	319.12	322.25	372.30	10.00	542245.68	817921.83	N 32 29 14.99	W 103 26 10.78
	11700.00	81.71	359.52	11430.96	416.32	419.44	371.49	10.00	542342.87	817921.02	N 32 29 15.96	W 103 26 10.78
Hold to TD	11742.92	86.00	359.52	11435.56	458.98	462.11	371.13	10.00	542385.54	817920.66	N 32 29 16.38	W 103 26 10.78
	11800.00	86.00	359.52	11439.54	515.92	519.05	370.65	0.00	542442.47	817920.18	N 32 29 16.94	W 103 26 10.78
	11900.00	86.00	359.52	11446.52	615.68	618.80	369.82	0.00	542542.22	817919.34	N 32 29 17.93	W 103 26 10.78
	12000.00	86.00	359.52	11453.50	715.43	718.55	368.98	0.00	542641.98	817918.51	N 32 29 18.92	W 103 26 10.78
	12100.00	86.00	359.52	11460.48	815.19	818.30	368.14	0.00	542741.73	817917.67	N 32 29 19.90	W 103 26 10.78
	12200.00	86.00	359.52	11467.46	914.95	918.06	367.31	0.00	542841.48	817916.83	N 32 29 20.89	W 103 26 10.78
	12300.00	86.00	359.52	11474.44	1014.70	1017.81	366.47	0.00	542941.23	817916.00	N 32 29 21.88	W 103 26 10.78
	12400.00	86.00	359.52	11481.42	1114.46	1117.56	365.63	0.00	543040.98	817915.16	N 32 29 22.86	W 103 26 10.78
	12500.00	86.00	359.52	11488.40	1214.21	1217.31	364.80	0.00	543140.74	817914.32	N 32 29 23.85	W 103 26 10.78
	12600.00	86.00	359.52	11495.38	1313.97	1317.07	363.96	0.00	543240.49	817913.49	N 32 29 24.84	W 103 26 10.78
	12700.00	86.00	359.52	11502.36	1413.73	1416.82	363.12	0.00	543340.24	817912.65	N 32 29 25.83	W 103 26 10.78
	12800.00	86.00	359.52	11509.34	1513.48	1516.57	362.29	0.00	543439.99	817911.81	N 32 29 26.81	W 103 26 10.78
	12900.00	86.00	359.52	11516.32	1613.24	1616.32	361.45	0.00	543539.75	817910.98	N 32 29 27.80	W 103 26 10.78
	13000.00	86.00	359.52	11523.30	1713.00	1716.08	360.61	0.00	543639.50	817910.14	N 32 29 28.79	W 103 26 10.78
	13100.00	86.00	359.52	11530.28	1812.75	1815.83	359.78	0.00	543739.25	817909.30	N 32 29 29.77	W 103 26 10.78
	13200.00	86.00	359.52	11537.26	1912.51	1915.58	358.94	0.00	543839.00	817908.47	N 32 29 30.76	W 103 26 10.78
	13300.00	86.00	359.52	11544.24	2012.26	2015.33	358.10	0.00	543938.75	817907.63	N 32 29 31.75	W 103 26 10.78
	13400.00	86.00	359.52	11551.21	2112.02	2115.09	357.27	0.00	544038.51	817906.79	N 32 29 32.73	W 103 26 10.78
	1350											

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	16100.00	86.00	359.52	11739.66	4805.44	4808.41	334.68	0.00	546731.81	817884.21	N 32 29 59.39	W 103 26 10.78
	16200.00	86.00	359.52	11746.64	4905.19	4908.16	333.84	0.00	546831.56	817883.37	N 32 30 0.37	W 103 26 10.78
	16300.00	86.00	359.52	11753.62	5004.95	5007.91	333.00	0.00	546931.32	817882.53	N 32 30 1.36	W 103 26 10.78
	16400.00	86.00	359.52	11760.60	5104.70	5107.67	332.17	0.00	547031.07	817881.70	N 32 30 2.35	W 103 26 10.78
	16500.00	86.00	359.52	11767.58	5204.46	5207.42	331.33	0.00	547130.82	817880.86	N 32 30 3.33	W 103 26 10.78
	16600.00	86.00	359.52	11774.56	5304.22	5307.17	330.49	0.00	547230.57	817880.02	N 32 30 4.32	W 103 26 10.78
	16700.00	86.00	359.52	11781.53	5403.97	5406.92	329.66	0.00	547330.32	817879.19	N 32 30 5.31	W 103 26 10.78
	16800.00	86.00	359.52	11788.51	5503.73	5506.68	328.82	0.00	547430.08	817878.35	N 32 30 6.29	W 103 26 10.78
	16900.00	86.00	359.52	11795.49	5603.48	5606.43	327.98	0.00	547529.83	817877.51	N 32 30 7.28	W 103 26 10.78
	17000.00	86.00	359.52	11802.47	5703.24	5706.18	327.15	0.00	547629.58	817876.68	N 32 30 8.27	W 103 26 10.78
	17100.00	86.00	359.52	11809.45	5803.00	5805.93	326.31	0.00	547729.33	817875.84	N 32 30 9.26	W 103 26 10.78
	17200.00	86.00	359.52	11816.43	5902.75	5905.69	325.47	0.00	547829.08	817875.00	N 32 30 10.24	W 103 26 10.78
	17300.00	86.00	359.52	11823.41	6002.51	6005.44	324.64	0.00	547928.84	817874.17	N 32 30 11.23	W 103 26 10.78
	17400.00	86.00	359.52	11830.39	6102.27	6105.19	323.80	0.00	548028.59	817873.33	N 32 30 12.22	W 103 26 10.78
	17500.00	86.00	359.52	11837.37	6202.02	6204.95	322.96	0.00	548128.34	817872.49	N 32 30 13.20	W 103 26 10.78
	17600.00	86.00	359.52	11844.35	6301.78	6304.70	322.13	0.00	548228.09	817871.66	N 32 30 14.19	W 103 26 10.78
	17700.00	86.00	359.52	11851.33	6401.53	6404.45	321.29	0.00	548327.85	817870.82	N 32 30 15.18	W 103 26 10.78
	17800.00	86.00	359.52	11858.31	6501.29	6504.20	320.45	0.00	548427.60	817869.98	N 32 30 16.17	W 103 26 10.78
	17900.00	86.00	359.52	11865.29	6601.05	6603.96	319.62	0.00	548527.35	817869.15	N 32 30 17.15	W 103 26 10.78
	18000.00	86.00	359.52	11872.27	6700.80	6703.71	318.78	0.00	548627.10	817868.31	N 32 30 18.14	W 103 26 10.78
	18100.00	86.00	359.52	11879.25	6800.56	6803.46	317.94	0.00	548726.85	817867.47	N 32 30 19.13	W 103 26 10.78
	18200.00	86.00	359.52	11886.23	6900.31	6903.21	317.11	0.00	548826.61	817866.64	N 32 30 20.11	W 103 26 10.78
	18300.00	86.00	359.52	11893.20	7000.07	7002.97	316.27	0.00	548926.36	817865.80	N 32 30 21.10	W 103 26 10.78
	18400.00	86.00	359.52	11900.18	7099.83	7102.72	315.43	0.00	549026.11	817864.96	N 32 30 22.09	W 103 26 10.78
	18500.00	86.00	359.52	11907.16	7199.58	7202.47	314.60	0.00	549125.86	817864.13	N 32 30 23.07	W 103 26 10.78
	18600.00	86.00	359.52	11914.14	7299.34	7302.22	313.76	0.00	549225.61	817863.29	N 32 30 24.06	W 103 26 10.78
	18700.00	86.00	359.52	11921.12	7399.10	7401.98	312.92	0.00	549325.37	817862.45	N 32 30 25.05	W 103 26 10.78
	18800.00	86.00	359.52	11928.10	7498.85	7501.73	312.09	0.00	549425.12	817861.62	N 32 30 26.04	W 103 26 10.78
	18900.00	86.00	359.52	11935.08	7598.61	7601.48	311.25	0.00	549524.87	817860.78	N 32 30 27.02	W 103 26 10.78
Chisholm Outland WCA State Unit 11-2 5H - BHL	18956.15	86.00	359.52	11939.00	7654.62	7657.49	310.78	0.00	549580.88	817860.31	N 32 30 27.58	W 103 26 10.78

Survey Type: Def Plan

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

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	31.000	1/100.000	30.000	30.000		NAL_MWD_1.0_DEG-Depth Only	Chisholm Outland WCA State Unit 11-2 5H / Chisholm Outland WCA State Unit 11-2 5H Rev0 smk
	1	31.000	18956.149	1/100.000	30.000	30.000		NAL_MWD_1.0_DEG	Chisholm Outland WCA State Unit 11-2 5H / Chisholm Outland WCA

Chisholm Outland WCA State Unit 11-2 5H Rev0 smk 16Oct19 Anti-Collision Summary Report

Analysis Date-24hr Time: October 16, 2019 - 17:53

Client: Chisholm

Field: NM Lea County (NAD 83)

Structure: Chisholm Outland WCA State Unit 11-2 5H

Slot: New Slot

Well: Chisholm Outland WCA State Unit 11-2 5H

Borehole: Chisholm Outland WCA State Unit 11-2 5H

Scan MD Range: 0.00ft ~ 18956.15ft

Analysis Method: 3D Least Distance

Reference Trajectory: Chisholm Outland WCA State Unit 11-2 5H Rev0 smk 16Oct19 (Def Plan)

Depth Interval: Every 10.00 Measured Depth (ft)

Rule Set: NAL Procedure: D&M AntiCollision Standard S002

Min Pts: All local minima indicated.

Version / Patch: 2.10.760.0

Database \ Project: us1153app452.dir.slb.com\drilling -NM Lea County 2.10

Trajectory Error Model: ISCSA0 3-D 95.000% Confidence 2.7955 sigma, for subject well. For offset wells, error model version is specified with each well respectively.

Offset Trajectories Summary

Offset Selection Criteria

Wellhead distance scan:

Selection filters:

Not performed!

Definitive Surveys - Definitive Plans - Definitive surveys exclude definitive plans

- All Non-Def Surveys when no Def-Survey is set in a borehole - All Non-Def Plans when no Def-Plan is set in a borehole

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		

Results highlighted: Sep-Factor separation <= 1.50 ft

30-025-35243 OUTLAND
STATE UNIT #003 (P&A) Incl
Only 0-13070' (Def Survey)

Fail Major

878.54	32.81	871.82	845.73	208.05	MAS = 10.00 (m)	0.00	0.00					MinPts	
878.58	32.81	870.80	845.77	166.03	MAS = 10.00 (m)	31.00	31.00					WRP	
770.75	213.92	627.28	556.83	5.45	OSF1.50	3860.00	3849.25					MinPt-CtCt	
766.96	232.40	611.18	534.57	4.99	OSF1.50	4140.00	4127.71	OSF<5.00				Enter Alert	
714.50	304.57	510.60	409.94	3.54	OSF1.50	5560.00	5541.09					MinPt-CtCt	
727.95	452.10	425.70	275.85	2.42	OSF1.50	8380.00	8361.05					MinPt-CtCt	
597.03	600.83	195.49	-3.80	1.49	OSF1.50	11310.00	11252.60	OSF<1.50				Enter Minor	
401.93	609.66	-5.62	-207.73	0.99	OSF1.50	11620.00	11413.94			OSF<1.00		Enter Major	
319.74	612.26	-89.37	-292.51	0.78	OSF1.50	11870.00	11444.43					MinPts	
407.70	614.62	-2.89	-206.93	0.99	OSF1.50	12120.00	11461.88			OSF>1.00		Exit Major	
612.10	616.05	200.56	-3.96	1.49	OSF1.50	12390.00	11480.72	OSF>1.50				Exit Minor	
2070.34	624.26	1653.33	1446.08	4.99	OSF1.50	13920.00	11587.51	OSF>5.00				Exit Alert	
7060.45	655.05	6622.92	6405.40	16.22	OSF1.50	18956.15	11939.00					TD	

30-025-35665 Chisholm
Outland State Unit #005 (Offset
Active) Inc Only 0 to 13515'
(Def Survey)

Fail Major

3174.46	32.81	3171.96	3141.65	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
3174.46	32.81	3171.85	3141.65	29333.88	MAS = 10.00 (m)	10.00	10.00					MinPts	
3174.48	32.81	3171.50	3141.67	6685.77	MAS = 10.00 (m)	31.00	31.00					WRP	
3292.60	253.46	3122.75	3039.14	19.67	OSF1.50	4410.00	4396.23					MINPT-O-EQU	
3295.28	257.45	3122.81	3037.82	19.37	OSF1.50	4490.00	4475.79					MINPT-O-EQU	
2475.79	748.47	1975.48	1727.32	4.98	OSF1.50	12230.00	11469.56	OSF<5.00				Enter Alert	
770.04	772.23	253.10	-2.18	1.50	OSF1.50	14000.00	11593.09	OSF<1.50				Enter Minor	
518.26	782.82	-5.64	-264.56	0.99	OSF1.50	14300.00	11614.03			OSF<1.00		Enter Major	
335.56	803.25	-200.78	-467.69	0.62	OSF1.50	14700.00	11641.95					MinPts	
521.90	788.39	-4.53	-266.49	0.99	OSF1.50	15100.00	11669.86	OSF>1.00				Exit Major	
783.10	784.38	259.35	-1.28	1.50	OSF1.50	15410.00	11691.50	OSF>1.50				Exit Minor	
2674.19	804.57	2136.98	1869.62	5.00	OSF1.50	17370.00	11828.30	OSF>5.00				Exit Alert	
4240.85	823.86	3690.78	3417.00	7.74	OSF1.50	18956.15	11939.00					TD	

Chisholm Outland State Unit 11-
2 2BS 2H MWD 0-1784' MD
(Def Survey)

Warning Alert

114.00	32.81	111.50	81.19	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
113.98	32.81	111.48	81.17	17571.17	MAS = 10.00 (m)	31.00	31.00					WRP	
48.79	32.81	38.98	15.98	6.36	MAS = 10.00 (m)	2230.00	2228.19	CtCt<=15m<15.00				Enter Alert	
42.79	32.81	32.45	9.99	5.15	MAS = 10.00 (m)	2480.00	2476.82					MinPts	
42.80	32.81	32.44	9.99	5.14	MAS = 10.00 (m)	2490.00	2486.76					MINPT-O-EQU	
41.37	32.81	26.76	8.56	3.21	MAS = 10.00 (m)	3190.00	3182.92					MinPts	
44.64	32.81	25.42	11.83	2.52	MAS = 10.00 (m)	3670.00	3660.29					MINPT-O-EQU	
48.95	32.81	27.51	16.14	2.45	MAS = 10.00 (m)	3990.00	3978.54					MinPt-O-SF	
51.85	32.85	29.11	19.00	2.44	OSF1.50	4230.00	4217.22					MINPT-O-EQU	
51.97	33.00	29.13	18.97	2.43	OSF1.50	4250.00	4237.11					MinPt-O-ADP	
52.36	33.30	29.32	19.06	2.43	OSF1.50	4290.00	4276.89					MinPt-O-SF	
71.20	46.52	39.35	24.67	2.34	OSF1.50	6040.00	6021.05					MinPt-CtCt	
71.27	46.80	39.24	24.47	2.33	OSF1.50	6080.00	6061.05					MINPT-O-EQU	
71.36	46.91	39.25	24.46	2.33	OSF1.50	6100.00	6081.05					MinPt-O-ADP	
71.49	47.00	39.32	24.49	2.33	OSF1.50	6120.00	6101.05					MinPt-O-SF	
130.75	41.19	102.46	89.57	4.97	OSF1.50	7330.00	7311.05	OSF>5.00				Exit Alert	
216.06	45.28	185.04	170.73	7.49	OSF1.50	9210.00	9191.05					MinPt-O-ADP	
216.76	45.63	185.50	171.13	7.45	OSF1.50	9310.00	9291.05					MinPt-O-SF	
1272.63	46.59	1240.74	1226.04	43.21	OSF1.50	11780.00	11438.15					MINPT-O-EQU	
1280.14	56.37	1241.72	1223.77	35.58	OSF1.50	12010.00	11454.20					MinPt-O-ADP	
1393.21	150.04	1292.35	1243.17	14.14	OSF1.50	14050.00	11596.58					MinPt-CtCt	
1393.68	169.17	1280.06	1224.50	12.52	OSF1.50	14480.00	11626.59					MinPt-CtCt	
1394.14	178.46	1274.34	1215.68	11.86	OSF1.50	14690.00	11641.25					MinPt-CtCt	
1396.26	184.83	1272.20	1211.42	11.47	OSF1.50	14820.00	11650.32					MINPT-O-EQU	
1400.32	190.87	1272.24	1209.45	11.13	OSF1.50	14940.00	11658.70					MINPT-O-EQU	
1417.74	216.43	1272.62	1201.31	9.92	OSF1.50	15440.00	11693.59					MINPT-O-EQU	
1427.06	232.12	1271.48	1194.93	9.31	OSF1.50	15760.00	11715.93					MINPT-O-EQU	
1434.33	243.08	1271.45	1191.26	8.93	OSF1.50	15970.00	11730.58					MINPT-O-EQU	
1444.63	258.92	1271.15	1185.72	8.44	OSF1.50	16280.00	11752.22					MINPT-O-EQU	
1447.75	262.68	1271.80	1185.08	8.33	OSF1.50	16360.00	11757.80					MinPt-O-ADP	
1604.24	363.48	1361.09	1240.76	6.66	OSF1.50	18956.15	11939.00					MinPt-O-SF	

30-025-35325 BUTKUS 2
STATE #001 (T&A) Incl only 0-
13475' (Def Survey)

Warning Alert

8493.94	32.81	8491.44	8461.14	N/A	MAS = 10.00 (m)	0.00	0.00					MinPts	
8493.96	32.81	8491.46	8461.15	N/A	MAS = 10.00 (m)	31.00	31.00					WRP	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Cl-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
8494.03	32.81	8491.44	8461.22	97200.79		MAS = 10.00 (m)	70.00	70.00				MINPT-O-EQU	
8494.23	32.81	8491.44	8461.42	29557.56		MAS = 10.00 (m)	130.00	130.00				MINPT-O-EQU	
8487.49	32.81	8478.42	8454.68	1293.45		MAS = 10.00 (m)	1600.00	1599.99				MinPt-O-SF	
8483.20	32.81	8474.00	8450.39	1266.92		MAS = 10.00 (m)	2050.00	2049.16				MinPts	
8483.23	32.81	8473.97	8450.43	1255.72		MAS = 10.00 (m)	2090.00	2088.96				MINPT-O-EQU	
8519.88	44.56	8489.34	8475.32	303.78		OSF1.50	4280.00	4266.94				MinPt-CtCt	
8521.86	49.45	8488.06	8472.41	272.17		OSF1.50	4510.00	4495.68				MINPT-O-EQU	
8524.36	53.53	8487.83	8470.82	250.49		OSF1.50	4640.00	4624.97				MINPT-O-EQU	
8534.35	65.38	8489.93	8468.97	203.52		OSF1.50	5000.00	4983.00				MinPt-O-ADP	
8533.38	195.29	8402.35	8338.09	66.38		OSF1.50	7440.00	7421.05				MinPt-CtCt	
8536.88	320.86	8322.12	8216.00	40.21		OSF1.50	9880.00	9861.05				MinPt-CtCt	
1474.63	455.26	1166.31	1019.37	4.97		OSF1.50	18350.00	11896.69	OSF<5.00			Enter Alert	
912.67	495.71	577.35	416.96	2.80		OSF1.50	18956.15	11939.00				MinPts	

Chisholm Outland State Unit 11-
2 1BS 1H Off to 11895ft
Definitive (Def Survey)

Pass

114.25	32.81	111.75	81.44	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	
114.22	32.81	111.71	81.41	12410.16		MAS = 10.00 (m)	31.00	31.00				WRP	
78.50	32.81	68.31	45.70	9.89		MAS = 10.00 (m)	2370.00	2367.42				MinPts	
78.51	32.81	68.29	45.70	9.86		MAS = 10.00 (m)	2380.00	2377.37				MINPT-O-EQU	
81.48	32.81	70.73	48.67	9.58		MAS = 10.00 (m)	2560.00	2556.38				MinPt-O-SF	
183.27	32.81	163.77	150.46	10.64		MAS = 10.00 (m)	4600.00	4585.19				MinPts	
183.29	32.81	163.79	150.48	10.63		MAS = 10.00 (m)	4610.00	4595.13				MinPt-O-SF	
521.69	33.92	498.24	487.77	24.79		OSF1.50	8010.00	7991.05				MinPt-O-SF	
552.12	38.00	525.95	514.11	23.22		OSF1.50	8720.00	8701.05				MINPT-O-EQU	
456.01	51.22	421.04	404.80	13.96		OSF1.50	11120.00	11094.35				MinPt-CtCt	
456.02	51.26	421.01	404.76	13.95		OSF1.50	11130.00	11103.47				MinPts	
457.50	51.52	422.32	405.98	13.92		OSF1.50	11190.00	11156.57				MinPt-O-SF	
459.31	51.73	423.99	407.58	13.92		OSF1.50	11220.00	11181.95				MinPt-O-SF	
7745.89	57.29	7706.86	7688.60	211.99		OSF1.50	18956.15	11939.00				TD	

Chisholm Outland State Unit 11-
2 1BS 1H ST01 Off to 17054ft
Definitive (Def Survey)

Pass

114.25	32.81	111.75	81.44	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	
114.22	32.81	111.71	81.41	12410.16		MAS = 10.00 (m)	31.00	31.00				WRP	
78.50	32.81	68.31	45.70	9.89		MAS = 10.00 (m)	2370.00	2367.42				MinPts	
78.51	32.81	68.29	45.70	9.86		MAS = 10.00 (m)	2380.00	2377.37				MINPT-O-EQU	
81.48	32.81	70.73	48.67	9.58		MAS = 10.00 (m)	2560.00	2556.38				MinPt-O-SF	
183.27	32.81	163.77	150.46	10.64		MAS = 10.00 (m)	4600.00	4585.19				MinPts	
183.29	32.81	163.79	150.48	10.63		MAS = 10.00 (m)	4610.00	4595.13				MinPt-O-SF	
521.69	33.92	498.24	487.77	24.79		OSF1.50	8010.00	7991.05				MinPt-O-SF	
552.12	38.00	525.95	514.11	23.22		OSF1.50	8720.00	8701.05				MINPT-O-EQU	
550.62	39.28	523.60	511.34	22.35		OSF1.50	8990.00	8971.05				MinPt-CtCt	
550.64	39.31	523.60	511.33	22.33		OSF1.50	9000.00	8981.05				MinPts	
551.62	39.48	524.47	512.14	22.27		OSF1.50	9060.00	9041.05				MinPt-O-SF	
2016.23	39.36	1989.16	1976.87	81.95		OSF1.50	11820.00	11440.94				MinPt-CtCt	
2018.03	44.08	1987.81	1973.95	72.70		OSF1.50	11990.00	11452.81				MINPT-O-EQU	
2016.45	53.55	1979.92	1962.90	59.17		OSF1.50	12250.00	11470.95				MinPt-CtCt	
2014.20	62.32	1971.81	1951.87	50.44		OSF1.50	12500.00	11488.40				MinPt-CtCt	
2014.90	65.51	1970.35	1949.39	47.91		OSF1.50	12610.00	11496.08				MINPT-O-EQU	
2015.74	66.55	1970.54	1949.19	47.15		OSF1.50	12650.00	11498.87				MinPt-O-ADP	
2020.06	75.22	1969.08	1944.84	41.62		OSF1.50	12860.00	11513.53				MinPt-CtCt	
2021.67	80.19	1967.38	1941.48	38.98		OSF1.50	13020.00	11524.69				MINPT-O-EQU	
2035.50	97.28	1969.82	1938.22	32.18		OSF1.50	13500.00	11558.19				MinPt-O-ADP	
2067.04	123.98	1983.55	1943.06	25.49		OSF1.50	14160.00	11604.26				MinPt-O-ADP	
2194.74	198.21	2061.77	1996.53	16.80		OSF1.50	16120.00	11741.05				MINPT-O-EQU	
2200.46	206.93	2061.68	1993.54	16.13		OSF1.50	16340.00	11756.41				MINPT-O-EQU	
2205.37	214.95	2061.23	1990.42	15.55		OSF1.50	16560.00	11771.76				MINPT-O-EQU	
2206.01	215.73	2061.35	1990.28	15.50		OSF1.50	16590.00	11773.86				MinPt-O-ADP	
2420.93	295.59	2223.04	2125.34	12.38		OSF1.50	18956.15	11939.00				MinPt-O-SF	

Chisholm Energy Operating, LLC

801 Cherry St., Suite 1200-Unit 20

Fort Worth, TX 76102

H2S Contingency Plan

Lea County, NM

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road. Crew should then block entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are NO homes or buildings in or near the ROE.

Assumed 100 ppm ROE = 3000'
100 ppm H₂S concentration shall trigger activation of this plan

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must:

- « Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- « Evacuate any public places encompassed by the 100 ppm ROE.
- « Be equipped with H₂S monitors and air packs in order to control the release.
- « Use the "buddy system" to ensure no injuries occur during the response.
- « Take precautions to avoid personal injury during this operation.
- « Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- « Have received training
 - in the: Detection of
 - H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air=1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air=1	2 ppm	N/A	1000 ppm

Contacting Authorities

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

Hydrogen Sulfide Drilling Operations Plan

1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
 - A. Characteristics of H2S
 - B. Physical effects and hazards
 - C. Principal and operation of H2S detectors, warning system and briefing areas.
 - D. Evacuation procedure, routes and first aid.
 - E. Proper use of safety equipment & life support systems
 - F. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30-minute pressure demand air packs.
2. H2S Detection and Alarm Systems:
 - a. H2S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary.
 - b. An audio alarm system will be installed on the derrick floor and in the top doghouse.
3. Windsock and/or wind streamers:
 - a. Windsock at mudpit area should be high enough to be visible.
 - b. Windsock on the rig floor and/ or top doghouse should be high enough to be visible.
4. Condition Flags and Signs
 - a. Warning sign on access road to location.
 - b. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H2S present in dangerous concentration). Only H2S trained and certified personnel

admitted to location.

5. Well control equipment:

- a. See exhibit BOP and Choke Diagrams

6. Communication:

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

7. Drill stem Testing:

No DSTs are planned at this time.

- 8. Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
- 9. If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

Emergency Assistance Telephone List

Chisholm Energy Holdings, LLC

Chisholm Energy Operating, LLC

Vice President of Operations-Brad Grandstaff

Office: (817)953-6063

Office: (817)953-3150

Cell: (972)977-9221

Drilling Superintendent-Russell Simons

Cell: (830)285-7501

Production Superintendent-Paul Martinez

Cell: (325)206-1722

Public Safety:		911 or
Lea County Sheriff's Department	Number:	(575)396-3611
Lea County Emergency Management-Lorenzo Velasquez	Number:	(575)391-2983
Lea County Fire Marshal		
Lorenzo Velasquez, Director	Number:	(575)391-2983
Jeff Broom, Deputy Fire Marshal	Number:	(575)391-2988
Fire Department:		
Knowles Fire Department	Number:	(505)392-2810
City of Hobbs Fire Department	Number:	(505)397-9308
Jal Volunteer Fire Department	Number:	(505)395-2221
Lovington Fire Department	Number:	(575)396-2359
Maljamar Fire Department	Number:	(505)676-4100
Tatum Volunteer Fire Department	Number:	(505)398-3473
Eunice Fire Department	Number:	(575)394-3258
Hospital: Lea Regional Medical Center	Number:	(575)492-5000
AirMed: Medevac	Number:	(888)303-9112
Dept. of Public Safety	Number:	(505)827-9000
New Mexico OCD-Dist. 1-Hobbs-	Office	Number: (575)393-6161
	Emergency	Number: (575)370-3186
Lea County Road Department	Number:	(575)391-2940
NMDOT	Number:	(505)827-5100