

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on page 44

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM32860
2. Name of Operator CHISHOLM ENERGY OPERATING LLC		6. If Indian, Allottee or Tribe Name
Contact: JENNIFER ELROD Email: jelrod@chisholmenergy.com		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 801 CHERRY STREET SUITE 1200 UNIT 20 FORT WORTH, TX 76102	3b. Phone No. (include area code) Ph: 817-953-3728	8. Well Name and No. BUFFALO 12-1 FED COM 2BS 1H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 12 T19S R33E 125FSL 1320FWL 32.667809 N Lat, 103.621078 W Lon		9. API Well No. 30-025-45128-00-X1
		10. Field and Pool or Exploratory Area BUFFALO
		11. County or Parish, State LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

****SUNDRY TO AMEND SURFACE HOLE LOCATION, FIRST TAKE POINT, LAST TAKE POINT/BOTTOM HOLE LOCATION****

SURFACE HOLE LOCATION/KOP CHANGE
FROM: 125 FSL & 1320 FWL
TO: 275 FSL & 1380 FWL

FIRST TAKE POINT/LANDING POINT CHANGE
FROM: 750 FSL & 1475 FWL
TO: 600 FSL & 1475 FWL

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #469395 verified by the BLM Well Information System

For CHISHOLM ENERGY OPERATING LLC, sent to the Hobbs

Committed to AFMSS for processing by PRISCILLA PEREZ on 06/17/2019 (19PP2226SE)

Name (Printed/Typed) JENNIFER ELROD

Title SENIOR REGULATORY TECH

Signature (Electronic Submission)

Date 06/17/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <i>Cody Lutz</i>	Title AFM	Date 06/25/2019
Conditions of approval, if any, are attached. Approval of this notice 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.		Office CFO

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.

(Instructions on page 2)

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Additional data for EC transaction #469395 that would not fit on the form

32. Additional remarks, continued

LAST TAKE POINT/BOTTOM HOLE CHANGE
FROM: 330 FNL & 1475 FWL
TO: 100 FNL & 1475 FWL

Revisions to Operator-Submitted EC Data for Sundry Notice #469395

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM32860	NMNM32860
Agreement:		
Operator:	CHISHOLM ENERGY OPERATING, LLC 801 CHERRY STREET SUITE 1200-UNIT 20 FORT WORTH, TX 76102 Ph: 817-953-3728	CHISHOLM ENERGY OPERATING LLC 801 CHERRY STREET SUITE 1200 UNIT 20 FORT WORTH, TX 76102 Ph: 817 953 6063
Admin Contact:	JENNIFER ELROD SR. REGULATORY ANALYST E-Mail: jelrod@chisholmenergy.com Cell: 940-045-2621 Ph: 817-953-3728	JENNIFER ELROD SENIOR REGULATORY TECH E-Mail: jelrod@chisholmenergy.com Cell: 940-452-6214 Ph: 817-953-3728
Tech Contact:	JENNIFER ELROD SR. REGULATORY ANALYST E-Mail: jelrod@chisholmenergy.com Cell: 940-045-2621 Ph: 817-953-3728	JENNIFER ELROD SENIOR REGULATORY TECH E-Mail: jelrod@chisholmenergy.com Cell: 940-452-6214 Ph: 817-953-3728
Location:		
State:	NM	NM
County:	LEA	LEA
Field/Pool:	BUFFALO;BONE SPRING, SE	BUFFALO
Well/Facility:	BUFFALO 12-1 FED COM 2BS 1H Sec 12 T19S R33E Mer NMP SESW 275FSL 1380FWL 32.668220 N Lat, 103.620661 W Lon	BUFFALO 12-1 FED COM 2BS 1H Sec 12 T19S R33E 125FSL 1320FWL 32.667809 N Lat, 103.621078 W Lon

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 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
REVISED SHL, FTP, LTP, BHL

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-45128	² Pool Code 8246	³ Pool Name BUFFALO; BONE SPRING, SOUTHEAST
⁴ Property Code	⁵ Property Name BUFFALO 12-1 FED COM 2BS	⁶ Well Number 1H
⁷ OGRID No. 372137	⁸ Operator Name CHISHOLM ENERGY OPERATING, LLC	⁹ Elevation 3712.9

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
N	12	19 S	33 E		275	SOUTH	1380	WEST	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
3	1	19 S	33 E		100	NORTH	1475	WEST	LEA

¹² Dedicated Acres 324.81	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.

BOTTOM OF HOLE & LTP 100' FNL, 1475' FWL LAT. = 32.6966316°N LONG. = 103.6203222°W NMSP EAST (FT) N = 617903.11 E = 760677.36 BUFFALO 12-1 FED COM 2BS 1H & KOP 275' FSL, 1380' FWL ELEV. = 3712.9' LAT. = 32.6682201°N (NAD83) LONG. = 103.6206617°W NMSP EAST (FT) N = 607565.75 E = 760842.36 NMSP EAST (FT) N = 617987.52 E = 759201.96 NMSP EAST (FT) N = 612567.94 E = 759244.78 NMSP EAST (FT) N = 607285.41 E = 759263.63	Diagram showing well location, sections, and acreage. Includes labels for LOT 4, LOT 3, LOT 2, LOT 1, SEC 1, SEC 12, and various survey points like SHL, GRID BNG, and FIRST TAKE POINT.	NMSP EAST (FT) N = 618015.30 E = 761841.30 NMSP EAST (FT) N = 618043.07 E = 764480.65 NMSP EAST (FT) N = 612574.87 E = 761874.71 NMSP EAST (FT) N = 612581.31 E = 764504.78 NMSP EAST (FT) N = 607295.76 E = 761899.53 NMSP EAST (FT) N = 607303.06 E = 764529.78	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> 06/14/2019 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. JUNE 14, 2019 Date of Survey <i>FILMON F. JARAMILLO</i> Signature and Seal of Professional Surveyor Certificate Number: FILMON F. JARAMILLO, PLS 12797 SURVEY NO. 5714D
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Intent ☒ As Drilled ☐

API # 30-025-45128			
Operator Name: CHISHOLM ENERGY OPERATING, LLC		Property Name: BUFFALO 12-1 FED COM 2BS	Well Number 1H

Kick Off Point (KOP)

UL N	Section 12	Township 19S	Range 33E	Lot	Feet 275	From N/S SOUTH	Feet 1380	From E/W WEST	County LEA
Latitude 32.6682201					Longitude 103.6206617			NAD 83	

First Take Point (FTP)

UL N	Section 12	Township 19S	Range 33E	Lot	Feet 600	From N/S SOUTH	Feet 1475	From E/W WEST	County LEA
Latitude 32.6691124					Longitude 103.6203498			NAD 83	

Last Take Point (LTP)

UL C	Section 1	Township 19S	Range 33E	Lot 3	Feet 100	From N/S NORTH	Feet 1475	From E/W WEST	County LEA
Latitude 32.6966316					Longitude 103.6203222			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.

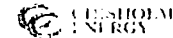
API #			
Operator Name:		Property Name:	Well Number

KZ 06/29/2018

Chisholm Buffalo 12-1 Fed Com 2BS 1H Rev0 BT 13JUN19 Proposal

Geodetic Report

(Def Plan)



Report Date: June 17, 2019 - 01:31 PM
 Client: Chisholm
 Field: NM Lea County (NAD 83)
 Structure / Slot: Chisholm Buffalo 12-1 Fed Com 2BS 1H / Chisholm Buffalo 12-1 Fed Com 2BS 1H
 Well: Chisholm Buffalo 12-1 Fed Com 2BS 1H
 Borehole: Original Borehole
 UWI / APIS: Unknown / Unknown
 Survey Name: Chisholm Buffalo 12-1 Fed Com 2BS 1H Rev0 BT 13JUN19
 Survey Date: June 13, 2019
 Tort / AHD / DDI / ERD Ratio: 101.008 * / 10802.608 ft / 6.354 / 1.121
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 40' 5.59220", W 103° 37' 14.38217"
 Location Grid N/E Y/X: N 607565.750 RUS, E 760642.380 RUS
 CRS Grid Convergence Angle: 0.3847 °
 Grid Scale Factor: 0.99998417
 Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 359.683 ° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3744.900 ft above MSL
 Seabed / Ground Elevation: 3712.900 ft above MSL
 Magnetic Declination: 6.808 °
 Total Gravity Field Strength: 998.5107 mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48174.283 nT
 Magnetic Dip Angle: 60.808 °
 Declination Date: June 21, 2019
 Magnetic Declination Model: HDGM 2019
 North Reference: Grid North
 Grid Convergence Used: 0.3847 °
 Total Corr Mag North->Grid North: 6.2229 °
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northings (ft)	Easting (ft)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
SHL	0.00	0.00	0.53	0.00	0.00	0.00	0.00	N/A	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	100.00	0.00	156.18	100.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	200.00	0.00	156.18	200.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	300.00	0.00	156.18	300.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	400.00	0.00	156.18	400.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	500.00	0.00	156.18	500.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	600.00	0.00	156.18	600.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	700.00	0.00	156.18	700.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	800.00	0.00	156.18	800.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	900.00	0.00	156.18	900.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	1000.00	0.00	156.18	1000.00	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
Build 1" DLS	1002.70	0.00	156.18	1002.70	0.00	0.00	0.00	0.00	607565.75	760642.38	N 32 40 5.59	W 103 37 14.38
	1100.00	0.97	156.18	1100.00	-0.76	-0.76	0.33	1.00	607564.99	760642.69	N 32 40 5.58	W 103 37 14.38
	1200.00	1.97	156.18	1199.98	-3.12	-3.11	1.37	1.00	607562.84	760643.73	N 32 40 5.58	W 103 37 14.37
	1300.00	2.97	156.18	1299.87	-7.07	-7.05	3.11	1.00	607558.70	760645.47	N 32 40 5.52	W 103 37 14.35
	1400.00	3.97	156.18	1399.68	-12.63	-12.60	5.58	1.00	607553.15	760647.92	N 32 40 5.47	W 103 37 14.32
	1500.00	4.97	156.18	1499.38	-19.78	-19.73	8.71	1.00	607548.02	760651.07	N 32 40 5.40	W 103 37 14.28
Hold	1502.88	5.00	156.18	1502.24	-20.01	-19.96	8.81	1.00	607545.79	760651.17	N 32 40 5.39	W 103 37 14.28
Rustler	1549.51	5.00	156.18	1548.70	-23.74	-23.68	10.45	0.00	607542.07	760652.81	N 32 40 5.38	W 103 37 14.28
	1600.00	5.00	156.18	1599.00	-27.78	-27.71	12.23	0.00	607538.04	760654.59	N 32 40 5.32	W 103 37 14.24
	1700.00	5.00	156.18	1698.81	-35.77	-35.68	15.75	0.00	607530.07	760658.11	N 32 40 5.24	W 103 37 14.20
	1800.00	5.00	156.18	1798.23	-43.77	-43.66	19.27	0.00	607522.09	760661.63	N 32 40 5.16	W 103 37 14.16
Salado	1843.63	5.00	156.18	1841.70	-47.26	-47.14	20.81	0.00	607518.61	760663.17	N 32 40 5.12	W 103 37 14.14
	1900.00	5.00	156.18	1897.85	-51.77	-51.63	22.79	0.00	607514.12	760665.15	N 32 40 5.08	W 103 37 14.12
	2000.00	5.00	156.18	1997.47	-59.76	-59.61	26.31	0.00	607506.14	760668.67	N 32 40 5.00	W 103 37 14.08
	2100.00	6.00	156.18	2097.09	-67.76	-67.59	29.84	0.00	607498.17	760672.19	N 32 40 4.92	W 103 37 14.04
	2200.00	5.00	156.18	2196.71	-75.76	-75.56	33.38	0.00	607490.19	760675.72	N 32 40 4.84	W 103 37 14.00
	2300.00	5.00	156.18	2296.33	-83.75	-83.54	36.88	0.00	607482.21	760679.24	N 32 40 4.76	W 103 37 13.96
	2400.00	5.00	156.18	2395.95	-91.75	-91.51	40.40	0.00	607474.24	760682.76	N 32 40 4.68	W 103 37 13.92
	2500.00	5.00	156.18	2495.57	-99.75	-99.49	43.92	0.00	607466.26	760686.28	N 32 40 4.60	W 103 37 13.88
	2600.00	5.00	156.18	2595.19	-107.74	-107.47	47.44	0.00	607458.29	760689.80	N 32 40 4.53	W 103 37 13.84
	2700.00	5.00	156.18	2694.81	-115.74	-115.44	50.96	0.00	607450.31	760693.32	N 32 40 4.45	W 103 37 13.80
	2800.00	6.00	156.18	2794.43	-123.74	-123.42	54.48	0.00	607442.34	760696.84	N 32 40 4.37	W 103 37 13.75
	2900.00	5.00	156.18	2894.04	-131.73	-131.40	58.00	0.00	607434.36	760700.36	N 32 40 4.29	W 103 37 13.71
	3000.00	5.00	156.18	2993.66	-139.73	-139.37	61.52	0.00	607426.38	760703.88	N 32 40 4.21	W 103 37 13.67
	3100.00	5.00	156.18	3093.28	-147.73	-147.35	65.05	0.00	607418.41	760707.40	N 32 40 4.13	W 103 37 13.63
	3200.00	5.00	156.18	3192.90	-155.72	-155.32	68.57	0.00	607410.43	760710.92	N 32 40 4.05	W 103 37 13.59
	3300.00	5.00	156.18	3292.52	-163.72	-163.30	72.09	0.00	607402.46	760714.44	N 32 40 3.97	W 103 37 13.55
	3400.00	5.00	156.18	3392.14	-171.72	-171.28	75.61	0.00	607394.48	760717.97	N 32 40 3.89	W 103 37 13.51
	3500.00	5.00	156.18	3491.76	-179.71	-179.25	79.13	0.00	607386.51	760721.49	N 32 40 3.81	W 103 37 13.47
	3600.00	5.00	156.18	3591.38	-187.71	-187.23	82.65	0.00	607378.53	760725.01	N 32 40 3.73	W 103 37 13.43
	3700.00	5.00	156.18	3691.00	-195.71	-195.20	86.17	0.00	607370.55	760728.53	N 32 40 3.68	W 103 37 13.39
7 Rivers	3732.63	5.00	156.18	3723.70	-198.33	-197.82	87.33	0.00	607367.94	760729.88	N 32 40 3.63	W 103 37 13.38
Drop 1" DLS	3785.72	5.00	156.18	3778.39	-202.56	-202.04	89.19	0.00	607363.72	760731.55	N 32 40 3.59	W 103 37 13.35
	3800.00	4.88	156.18	3760.62	-203.69	-203.18	89.88	1.00	607362.59	760732.04	N 32 40 3.58	W 103 37 13.35
	3900.00	3.88	156.18	3890.33	-210.68	-210.12	92.75	1.00	607355.94	760735.11	N 32 40 3.51	W 103 37 13.31
	4000.00	2.88	156.18	3990.16	-218.03	-218.48	95.12	1.00	607350.28	760737.48	N 32 40 3.45	W 103 37 13.29
	4100.00	1.88	156.18	4090.07	-219.81	-219.24	96.78	1.00	607346.52	760739.14	N 32 40 3.42	W 103 37 13.27
	4200.00	0.88	156.18	4190.04	-221.98	-221.41	97.74	1.00	607344.35	760740.10	N 32 40 3.40	W 103 37 13.26
Hold	4285.89	0.00	156.18	4275.63	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	4300.00	0.00	156.18	4290.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
Queen	4363.66	0.00	156.18	4363.70	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	4400.00	0.00	156.18	4390.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	4500.00	0.00	156.18	4460.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	4600.00	0.00	156.18	4590.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	4700.00	0.00	156.18	4680.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	4800.00	0.00	156.18	4780.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	4900.00	0.00	156.18	4890.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5000.00	0.00	156.18	4990.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5100.00	0.00	156.18	5090.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5200.00	0.00	156.18	5190.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5300.00	0.00	156.18	5290.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5400.00	0.00	156.18	5390.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5500.00	0.00	156.18	5490.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5600.00	0.00	156.18	5590.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5700.00	0.00	156.18	5690.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5800.00	0.00	156.18	5790.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	5900.00	0.00	156.18	5890.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	6000.00	0.00	156.18	5990.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	6100.00	0.00	156.18	6090.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	6200.00	0.00	156.18	6190.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W 103 37 13.25
	6300.00	0.00	156.18	6290.04	-222.57	-222.00	98.00	0.00	607343.78	760740.38	N 32 40 3.39	W

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TYD (ft)	VSEC (h)	NS (h)	EW (h)	DLS (1/100h)	Northings (ftUS)	Eastings (ftUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	6700.00	0.00	156.18	6890.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	6800.00	0.00	156.18	6790.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	6900.00	0.00	156.18	6890.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7000.00	0.00	156.18	6890.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7100.00	0.00	156.18	7090.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7200.00	0.00	156.18	7190.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7300.00	0.00	156.18	7290.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7400.00	0.00	156.18	7390.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7500.00	0.00	156.18	7490.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7600.00	0.00	156.18	7590.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7700.00	0.00	156.18	7690.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7800.00	0.00	156.18	7790.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
Bone Spring	7883.68	0.00	156.18	7853.70	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	7900.00	0.00	156.18	7890.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8000.00	0.00	156.18	7990.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8100.00	0.00	156.18	8090.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8200.00	0.00	156.18	8190.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8300.00	0.00	156.18	8290.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8400.00	0.00	156.18	8390.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8500.00	0.00	156.18	8490.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8600.00	0.00	156.18	8590.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8700.00	0.00	156.18	8690.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8800.00	0.00	156.18	8790.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	8900.00	0.00	156.18	8890.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	9000.00	0.00	156.18	8990.04	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
KOP Build 10"												
DLS	9075.89	0.00	156.18	9065.93	-222.57	-222.00	98.00	0.00	807343.78	780740.36	N 32 40 3.39	W 103 37 13.25
	9100.00	2.41	359.68	9090.03	-222.07	-221.49	98.00	10.00	807344.27	780740.35	N 32 40 3.39	W 103 37 13.25
1st Bone Spring												
SS	9128.74	5.28	359.68	9118.70	-220.14	-219.58	97.99	10.00	807348.19	780740.34	N 32 40 3.41	W 103 37 13.25
	9200.00	12.41	359.68	9189.07	-209.18	-208.81	97.92	10.00	807357.15	780740.28	N 32 40 3.52	W 103 37 13.25
	9300.00	22.41	359.68	9284.37	-178.30	-178.73	97.74	10.00	807367.03	780740.10	N 32 40 3.82	W 103 37 13.25
	9400.00	32.41	359.68	9373.03	-133.32	-132.75	97.47	10.00	807378.83	780739.83	N 32 40 4.27	W 103 37 13.25
	9500.00	42.41	359.68	9452.38	-72.65	-72.08	97.11	10.00	807393.88	780739.47	N 32 40 4.87	W 103 37 13.25
	9600.00	52.41	359.68	9519.94	0.88	1.45	96.87	10.00	807597.20	780739.03	N 32 40 5.00	W 103 37 13.25
	9700.00	62.41	359.68	9573.74	85.03	85.80	96.17	10.00	807651.34	780738.53	N 32 40 6.43	W 103 37 13.25
	9800.00	72.41	359.68	9612.10	177.24	177.81	95.83	10.00	807743.55	780737.98	N 32 40 7.35	W 103 37 13.25
2nd Bone Spring												
SS	9898.73	82.28	359.68	9633.70	273.48	274.02	95.06	10.00	807839.78	780737.41	N 32 40 8.30	W 103 37 13.25
	9900.00	82.41	359.68	9633.87	274.71	275.28	95.05	10.00	807841.02	780737.41	N 32 40 8.31	W 103 37 13.25
Landing Point												
	9985.89	91.00	359.68	9638.80	380.39	380.95	94.54	10.00	807926.68	780736.90	N 32 40 9.18	W 103 37 13.25
	10000.00	91.00	359.68	9638.55	374.49	375.05	94.48	0.00	807940.78	780736.81	N 32 40 9.30	W 103 37 13.25
	10100.00	91.00	359.68	9638.81	474.47	475.03	93.88	0.00	808040.77	780736.22	N 32 40 10.29	W 103 37 13.25
	10200.00	91.00	359.68	9638.06	574.48	575.02	93.27	0.00	808140.75	780735.63	N 32 40 11.28	W 103 37 13.25
2nd Bone Spring												
SS	10278.11	91.00	359.68	9633.70	652.55	653.11	92.81	0.00	808218.84	780735.18	N 32 40 12.05	W 103 37 13.25
	10300.00	91.00	359.68	9633.32	674.44	675.00	92.88	0.00	808240.73	780735.03	N 32 40 12.28	W 103 37 13.25
	10400.00	91.00	359.68	9631.57	774.43	774.98	92.08	0.00	808340.70	780734.44	N 32 40 13.25	W 103 37 13.24
	10500.00	91.00	359.68	9629.83	874.41	874.97	91.49	0.00	808440.68	780733.85	N 32 40 14.24	W 103 37 13.24
	10600.00	91.00	359.68	9628.08	974.40	974.95	90.90	0.00	808540.66	780733.25	N 32 40 15.23	W 103 37 13.24
	10700.00	91.00	359.68	9626.34	1074.38	1074.93	90.30	0.00	808640.64	780732.66	N 32 40 16.22	W 103 37 13.24
	10800.00	91.00	359.68	9624.59	1174.37	1174.92	89.71	0.00	808740.62	780732.06	N 32 40 17.21	W 103 37 13.24
	10900.00	91.00	359.68	9622.84	1274.35	1274.90	89.11	0.00	808840.60	780731.47	N 32 40 18.20	W 103 37 13.24
	11000.00	91.00	359.68	9621.10	1374.34	1374.88	88.52	0.00	808940.58	780730.88	N 32 40 19.19	W 103 37 13.24
	11100.00	91.00	359.68	9619.35	1474.32	1474.86	87.93	0.00	809040.56	780730.28	N 32 40 20.18	W 103 37 13.24
	11200.00	91.00	359.68	9617.61	1574.31	1574.85	87.33	0.00	809140.54	780729.69	N 32 40 21.17	W 103 37 13.24
	11300.00	91.00	359.68	9615.86	1674.29	1674.83	86.74	0.00	809240.52	780729.09	N 32 40 22.16	W 103 37 13.24
	11400.00	91.00	359.68	9614.12	1774.28	1774.81	86.14	0.00	809340.50	780728.50	N 32 40 23.15	W 103 37 13.24
	11500.00	91.00	359.68	9612.37	1874.26	1874.80	85.55	0.00	809440.48	780727.91	N 32 40 24.14	W 103 37 13.23
	11600.00	91.00	359.68	9610.63	1974.25	1974.78	84.96	0.00	809540.45	780727.31	N 32 40 25.13	W 103 37 13.23
	11700.00	91.00	359.68	9608.88	2074.23	2074.76	84.38	0.00	809640.43	780726.72	N 32 40 26.11	W 103 37 13.23
	11800.00	91.00	359.68	9607.13	2174.22	2174.75	83.77	0.00	809740.41	780726.12	N 32 40 27.10	W 103 37 13.23
	11900.00	91.00	359.68	9605.39	2274.20	2274.73	83.17	0.00	809840.39	780725.53	N 32 40 28.09	W 103 37 13.23
	12000.00	91.00	359.68	9603.64	2374.18	2374.71	82.58	0.00	809940.37	780724.93	N 32 40 29.08	W 103 37 13.23
	12100.00	91.00	359.68	9601.90	2474.17	2474.69	81.98	0.00	810040.35	780724.34	N 32 40 30.07	W 103 37 13.23
	12200.00	91.00	359.68	9600.15	2574.15	2574.68	81.39	0.00	810140.33	780723.74	N 32 40 31.06	W 103 37 13.23
	12300.00	91.00	359.68	9598.41	2674.14	2674.67	80.79	0.00	810240.31	780723.15	N 32 40 32.05	W 103 37 13.23
	12400.00	91.00	359.68	9596.66	2774.12	2774.65	80.20	0.00	810340.29	780722.55	N 32 40 33.04	W 103 37 13.23
	12500.00	91.00	359.68	9594.91	2874.11	2874.63	79.60	0.00	810440.27	780721.96	N 32 40 34.03	W 103 37 13.23
	12600.00	91.00	359.68	9593.17	2974.09	2974.61	79.01	0.00	810540.25	780721.36	N 32 40 35.02	W 103 37 13.22
	12700.00	91.00	359.68	9591.42	3074.08	3074.59	78.41	0.00	810640.23	780720.77	N 32 40 36.01	W 103 37 13.22
	12800.00	91.00	359.68	9589.68	3174.06	3174.58	77.82	0.00	810740.21	780720.17	N 32 40 37.00	W 103 37 13.22
	12900.00	91.00	359.68	9587.93	3274.05	3274.56	77.22	0.00	810840.18	780719.58	N 32 40 37.99	W 103 37 13.22
	13000.00	91.00	359.68	9586.18	3374.03	3374.54	76.63	0.00	810940.16	780718.98	N 32 40 38.98	W 103 37 13.22
	13100.00	91.00	359.68	9584.44	3474.02	3474.52	76.03	0.00	811040.14	780718.39	N 32 40 39.98	W 103 37 13.22
	13200.00	91.00	359.68	9582.69	3574.00	3574.51	75.44	0.00	811140.12	780717.79	N 32 40 40.95	W 103 37 13.22
	13300.00	91.00	359.68	9580.95	3673.99	3674.49	74.84	0.00	811240.10	780717.20	N 32 40 41.94	W 103 37 13.22
	13400.00	91.00	359.68	9579.20	3773.97	3774.47	74.24	0.00	811340.08	780716.60	N 32 40 42.93	W 103 37 13.22
	13500.00	91.00	359.68	9577.45	3873.96	3874.46	73.65	0				

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	16800.00	01.00	359.86	9523.32	6973.48	6973.93	55.15	0.00	814539.41	780697.51	N 32 41 14.59	W 103 37 13.19
	16700.00	01.00	359.86	9521.58	7073.47	7073.91	54.55	0.00	814639.39	780698.91	N 32 41 15.58	W 103 37 13.19
	16800.00	01.00	359.86	9519.83	7173.45	7173.89	53.96	0.00	814739.37	780699.31	N 32 41 16.57	W 103 37 13.19
	16900.00	01.00	359.86	9518.08	7273.44	7273.88	53.38	0.00	814839.35	780699.72	N 32 41 17.56	W 103 37 13.19
	17000.00	01.00	359.86	9516.34	7373.42	7373.86	52.78	0.00	814939.33	780699.12	N 32 41 18.55	W 103 37 13.19
	17100.00	01.00	359.86	9514.59	7473.41	7473.84	52.18	0.00	815039.31	780698.52	N 32 41 19.54	W 103 37 13.18
	17200.00	01.00	359.86	9512.84	7573.39	7573.83	51.58	0.00	815139.29	780698.92	N 32 41 20.53	W 103 37 13.18
	17300.00	01.00	359.86	9511.10	7673.38	7673.81	50.98	0.00	815239.27	780698.32	N 32 41 21.52	W 103 37 13.18
	17400.00	01.00	359.86	9509.35	7773.36	7773.79	50.37	0.00	815339.25	780697.72	N 32 41 22.50	W 103 37 13.18
	17500.00	01.00	359.86	9507.61	7873.35	7873.78	49.77	0.00	815439.23	780697.13	N 32 41 23.48	W 103 37 13.18
	17600.00	01.00	359.86	9505.86	7973.33	7973.76	49.17	0.00	815539.21	780696.53	N 32 41 24.48	W 103 37 13.18
	17700.00	01.00	359.86	9504.11	8073.32	8073.74	48.57	0.00	815639.19	780695.93	N 32 41 25.47	W 103 37 13.18
	17800.00	01.00	359.86	9502.37	8173.30	8173.72	47.97	0.00	815739.16	780695.33	N 32 41 26.46	W 103 37 13.18
	17900.00	01.00	359.86	9500.62	8273.29	8273.71	47.37	0.00	815839.14	780694.73	N 32 41 27.45	W 103 37 13.18
	18000.00	01.00	359.86	9498.87	8373.27	8373.69	46.78	0.00	815939.12	780694.13	N 32 41 28.44	W 103 37 13.18
	18100.00	01.00	359.86	9497.13	8473.25	8473.67	46.18	0.00	816039.10	780693.53	N 32 41 29.43	W 103 37 13.18
	18200.00	01.00	359.86	9495.38	8573.24	8573.66	45.58	0.00	816139.08	780692.93	N 32 41 30.42	W 103 37 13.18
	18300.00	01.00	359.86	9493.63	8673.22	8673.64	44.98	0.00	816239.06	780692.34	N 32 41 31.41	W 103 37 13.17
	18400.00	01.00	359.86	9491.89	8773.21	8773.62	44.38	0.00	816339.04	780691.74	N 32 41 32.40	W 103 37 13.17
	18500.00	01.00	359.86	9490.14	8873.19	8873.60	43.78	0.00	816439.02	780691.14	N 32 41 33.39	W 103 37 13.17
	18600.00	01.00	359.86	9488.39	8973.18	8973.59	43.18	0.00	816539.00	780690.54	N 32 41 34.38	W 103 37 13.17
	18700.00	01.00	359.86	9486.65	9073.16	9073.57	42.58	0.00	816638.98	780689.94	N 32 41 35.37	W 103 37 13.17
	18800.00	01.00	359.86	9484.90	9173.15	9173.55	41.98	0.00	816738.96	780689.34	N 32 41 36.35	W 103 37 13.17
	18900.00	01.00	359.86	9483.15	9273.13	9273.54	41.38	0.00	816838.94	780688.74	N 32 41 37.34	W 103 37 13.17
	19000.00	01.00	359.86	9481.41	9373.12	9373.52	40.78	0.00	816938.91	780688.14	N 32 41 38.33	W 103 37 13.17
	19100.00	01.00	359.86	9479.66	9473.10	9473.50	40.19	0.00	817038.89	780687.54	N 32 41 39.32	W 103 37 13.17
	19200.00	01.00	359.86	9477.91	9573.09	9573.49	39.59	0.00	817138.87	780686.94	N 32 41 40.31	W 103 37 13.17
	19300.00	01.00	359.86	9476.17	9673.07	9673.47	38.99	0.00	817238.85	780686.34	N 32 41 41.30	W 103 37 13.17
	19400.00	01.00	359.86	9474.42	9773.06	9773.45	38.39	0.00	817338.83	780685.75	N 32 41 42.29	W 103 37 13.16
	19500.00	01.00	359.86	9472.67	9873.04	9873.43	37.79	0.00	817438.81	780685.15	N 32 41 43.28	W 103 37 13.16
	19600.00	01.00	359.86	9470.93	9973.03	9973.42	37.19	0.00	817538.79	780684.55	N 32 41 44.27	W 103 37 13.16
	19700.00	01.00	359.86	9469.18	10073.01	10073.40	36.59	0.00	817638.77	780683.95	N 32 41 45.26	W 103 37 13.16
	19800.00	01.00	359.86	9467.43	10173.00	10173.38	35.99	0.00	817738.75	780683.35	N 32 41 46.25	W 103 37 13.16
	19900.00	01.00	359.86	9465.68	10272.98	10273.37	35.39	0.00	817838.73	780682.75	N 32 41 47.24	W 103 37 13.16
Chisholm Buffalo 12-1 Fed Com 2BS 1H - BHL	19984.40	01.00	359.86	9464.56	10337.37	10337.75	35.00	0.00	817903.11	780682.15	N 32 41 47.87	W 103 37 13.16

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	32.000	1/100.000	30.000	30.000		NAL_MWD_1.0_DEG-Depth Only	Original Borehole / Chisholm Buffalo 12-1 Fed Com 2BS 1H Rev0 BT 13JUN19
	1	32.000	19984.396	1/100.000	30.000	30.000		NAL_MWD_1.0_DEG	Original Borehole / Chisholm Buffalo 12-1 Fed Com 2BS 1H

...Original Borehole\Chisholm Buffalo 12-1 Fed Com 2BS 1H Rev0 BT 13JUN19

Borehole:	Well:	Field:	Structure:
Original Borehole	Chisholm Buffalo 12-1 Fed Com 2BS 1H	NM Lea County (NAD 83)	Chisholm Buffalo 12-1 Fed Com 2BS 1H

Gravity & Magnetic Parameters	Surface Location	Navigation	Measurements
Mode: HDOM 2019 MagDec: 6.66°	Dip: 60.80° PS: 48174.233N Date: 21-Jun-2019 Gravity PS: 989.511mgals (9.80665 Based)	RADSS New Mexico State Plane, Eastern Zone, US Feet Lat: N 32 48 8.83 Lon: W 103 27 54.38 Magnetic: 687648.788US Grid Conv: 6.3847° Easting: 789643.368US Scale Fact: 6.38996417	Chisholm Buffalo 12-1 Fed Com Start: 28.18 TVD Ref: RKB0744.91 above MSL Pore: Chisholm Buffalo 12-1 Fed Com 2BS 1H Rev0 BT 13JUN19

Critical Points							
Critical Point	BD	INCL	AZIM	TVD	YSEC	N(+Y)-4	E(+Y)-4
SHL	0.00	0.00	0.53	0.00	0.00	0.00	0.00
Build 1' DLS	1002.70	0.00	158.18	1002.70	0.00	0.00	0.00
Yield	1502.88	5.00	158.18	1502.24	-20.01	-19.88	8.81
Plaster	1549.51	5.00	158.18	1548.70	-23.74	-23.68	10.45
Selids	1843.83	5.00	158.18	1841.70	-47.28	-47.14	20.81
7 Rivers	3732.83	5.00	158.18	3723.70	-188.33	-187.82	87.33
Drop 1' DLS	3785.72	5.00	158.18	3776.39	-202.88	-202.04	88.19
Yield	4285.89	0.00	158.18	4275.83	-222.57	-222.00	98.00
Queen	4383.88	0.00	158.18	4383.70	-222.57	-222.00	98.00
Debris Mtn Cr	6383.88	0.00	158.18	6383.70	-222.57	-222.00	98.00
Bone Spring	7883.88	0.00	158.18	7883.70	-222.57	-222.00	98.00
KOP Build 10' DLS	8075.89	0.00	158.18	8065.83	-222.87	-222.00	98.00
1st Bone Spring SS	9128.74	5.28	359.88	9118.70	-220.14	-219.38	97.89
2nd Bone Spring SS	9838.73	82.28	359.88	9833.70	-273.48	-274.02	95.08
Landing Point	9985.89	91.00	359.88	9938.80	-380.39	-380.85	94.54
2nd Bone Spring SS	10078.11	91.00	359.88	9833.70	-832.55	-833.11	92.81
Chisholm Buffalo 12-1 Fed Com 2BS 1H - SHL	10884.40	91.00	359.88	9884.58	-1033.37	-1033.75	35.00
Stream	NuN			12083.70			
Wellcamp	NuN			10783.70			
2nd Bone Spring SS	NuN			10588.70			

CONTROLLED

Chisholm Buffalo 12-1 Fed Com 2BS 1H - Rev0 BT 13JUN19

Drawn by: []

Checked by: []

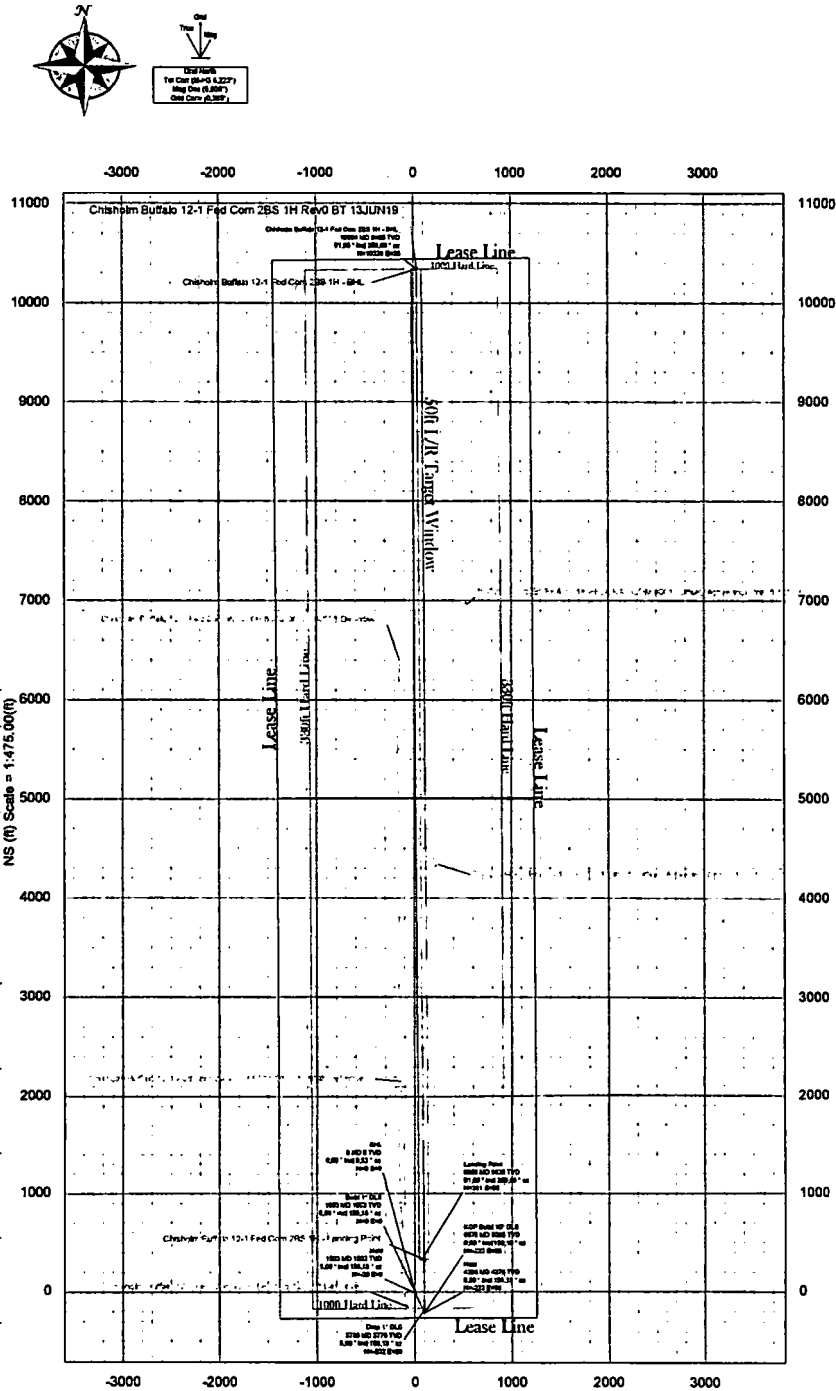
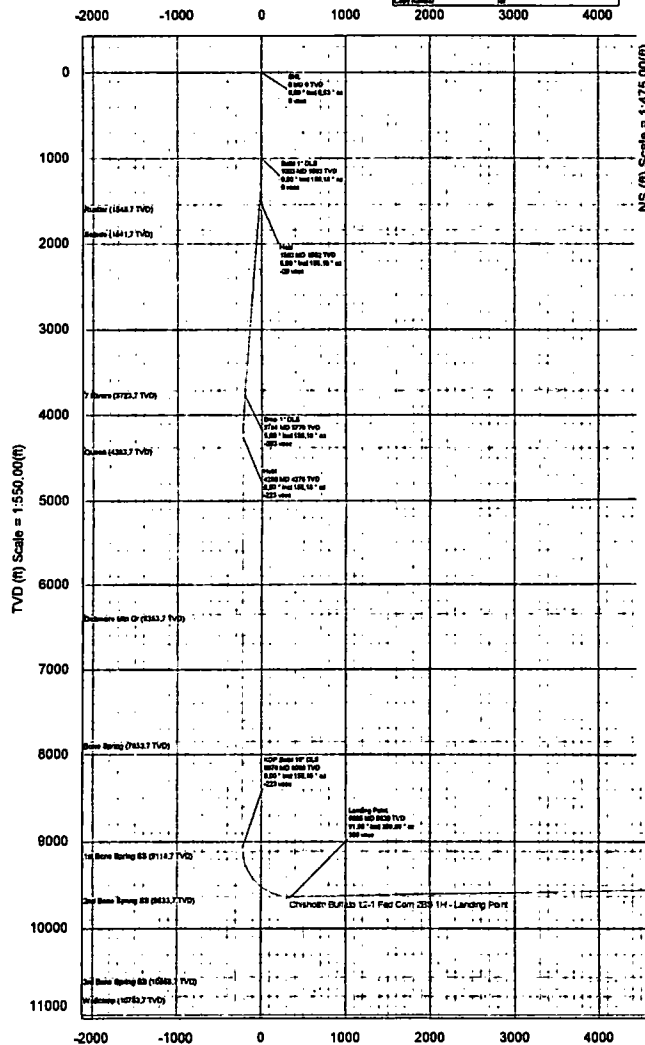
Scale: 1:1550.00

Date: 12-Jun-2019

By: []

For: []

Controlled by: []



Chisholm Buffalo 12-1 Fed Com 2BS 1H Rev0 BT 13JUN19

Chisholm Buffalo 12-1 Fed Com 2BS 1H - SHL

Chisholm Buffalo 12-1 Fed Com 2BS 1H - SHL