

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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 2

5. Lease Serial No.
NMLC063228

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
TRISTE DRAW 25 FEDERAL COM 15H

9. Well No.
30-025-44003-00-X1

10. Field and Pool or Exploratory Area
TRISTE DRAW-BONE SPRING

11. County or Parish, State
LEA COUNTY, NM

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
CIMAREX ENERGY COMPANY

Contact: FATIMA VASQUEZ
E-Mail: fvasquez@cimarex.com

3a. Address
600 N. MARIENFELD SUITE 600
MIDLAND, TX 79701

3b. Phone No. (include area code)
Ph: 432-620-1933

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 25 T23S R32E SESW 560FSL 2410FWL
32.269997 N Lat, 103.629082 W Lon

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.

Cimarex respectfully requests approval to change the SHL and BHL. No additional surface disturbance is required for the well pad.

Approved:
SHL - 560 FSL & 2410 FWL, Sec 25-23S-32E
BHL - 330 FNL & 2350 FWL, Sec 25-23S-32E

Proposed:
SHL - 500 FSL & 2470 FWL, Sec 25-23S-32E
BHL - 330 FNL & 2110 FWL, Sec 25-23S-32E

Please see attached plat, directional plan, and drilling plan for changes.

Engineering is Good. All previous Drilling COAs sh/ apply. 2S 6/6/19 *C-7-2019 3R* *Surface good same* *COA'S*

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

Electronic Submission #467266 verified by the BLM Well Information System
For CIMAREX ENERGY COMPANY, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 06/03/2019 (19PP2072SE)

Name (Printed/Typed) FATIMA VASQUEZ

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 05/31/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By *Cody R. Lantz*

Title *RFM-LAN*

Date *6/6/2019*

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 ****

KZ

1. Geological Formations

TVD of target 9,830
MD at TD 14,096

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	1240	N/A	
Salado	1730	N/A	
Base of Salt	4800	N/A	
Delaware Sands	5030	N/A	
Brushy Canyon	7360	Hydrocarbons	
Bone Spring	8830	Hydrocarbons	
Avalon Shale	9320	Hydrocarbons	
Avalon Target	9830	Hydrocarbons	
1st Bone Spring Sand	10040	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	1290	1290	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.25	2.93	5.20
12 1/4	0	5010	5010	9-5/8"	40.00	J-55	LT&C	1.48	1.49	2.59
8 3/4	0	9368	9368	5-1/2"	17.00	L-80	LT&C	1.43	1.77	2.02
8 3/4	9368	14096	9830	5-1/2"	17.00	L-80	BT&C	1.37	1.68	50.55
BLM Minimum Safety Factor								1.125	1	1.6 Dry 1.8 Wet

TVD was used on all calculations.

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

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

3. Cementing Program

Casing	# Sk	Wt. lb/gal	Yld ft ³ /sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	625	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	168	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	939	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	292	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	393	10.30	3.64	22.18		Lead: Tuned Light + LCM
	1149	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	45
Intermediate	0	51
Production	4810	25

4. Pressure Control Equipment

A variance is requested for the use of a diverter on the surface casing. See attached for schematic.					
BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
17 1/2	13 5/8	2M	Annular	X	50% of working pressure
			Blind Ram		2M
			Pipe Ram		
			Double Ram	X	
			Other		
12 1/4	13 5/8	2M	Annular	X	50% of working pressure
			Blind Ram		2M
			Pipe Ram		
			Double Ram	X	
			Other		
8 3/4	13 5/8	3M	Annular	X	50% of working pressure
			Blind Ram		3M
			Pipe Ram		
			Double Ram	X	
			Other		

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.

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

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1290'	FW Spud Mud	8.30 - 8.80	30-32	N/C
1290' to 5010'	Brine Water	9.70 - 10.20	30-32	N/C
5010' to 14096'	FW/Cut Brine	8.50 - 9.00	30-32	N/C

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

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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6. Logging and Testing Procedures

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

Additional Logs Planned	Interval
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7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	4600 psi
Abnormal Temperature	No

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

X	H ₂ S is present
X	H ₂ S plan is attached

8. Other Facets of Operation**9. Wellhead**

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13 5/8" BOP/BOPE system with a minimum working pressure of 3000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 3000 psi test. Annular will be tested to 50% of working pressure. The pressure test will be repeated at least every 30 days, as per Onshore Order No. 2.

The multi-bowl wellhead will be installed by vendor's representative. A copy of the installation instructions has been sent to the BLM field office.

The wellhead will be installed by a third-party welder while being monitored by the wellhead vendor representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 3000 psi.

The surface casing string will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

The casing string utilizing steel body pack-off will be tested to 70% of casing burst.

If well conditions dictate conventional slips will be set and BOPE will be tested to appropriate pressures based on permitted pressure requirements.

Cimarex Triste Draw 25 Federal #15H Rev1 RM 09May19 Anti-Collision Summary Report

Analysis Date-24hr Time: May 09, 2019 - 15:11

Client: Cimarex

Field: NM Lea County (NAD 83)

Structure: Cimarex Triste Draw 25 Federal #15H

Slot: Cimarex Triste Draw 25 Federal #15H

Well: Cimarex Triste Draw 25 Federal #15H

Borehole: Original Borehole

Scan MD Range: 0.00ft - 14098.21ft

Analysis Method:

Reference Trajectory:

Depth Interval:

Rule Set:

Min Pts:

Version / Patch:

Database \ Project:

3D Least Distance

Cimarex Triste Draw 25 Federal #15H Rev1 RM 09May19 (Def Plan)

Every 10.00 Measured Depth (ft)

NAL Procedure: D&M Anti-Collision Standard S002

All local minima indicated.

2.10.760.0

US1153APP452.dir.slb.com/drilling-NM Lea County 2.10

Trajectory Error Model: ISCWSA0 3-D 95.000% Confidence 2.7655 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	Sep.	Controlling	Reference Trajectory		Risk Level			Alert	Status
	Cl-Ct (ft)	MAS (ft)	EQU (ft)	Dev. (ft)	Fact.	Rule	MD (ft)	TVD (ft)	Alert	Minor	Major		

Results highlighted: Sep-Factor separation <= 1.50 ft

Cimarex Triste Draw 25 Federal
#15H Rev1 RM 09May19 (Def
Plan)

20.00	16.50	17.50	3.60	N/A	MAS = 5.03 (m)	0.00	0.00	Cl-Ct=15m=15.00				Enter Alert	Fail Minor
20.00	16.50	17.50	3.60	N/A	MAS = 5.03 (m)	26.00	26.00					WRP	
20.00	20.00	5.83	0.00	1.50	OSF1.50	1920.00	1920.00		OSF<1.50			Enter Minor	
20.00	22.64	4.07	-2.64	1.30	OSF1.50	2200.00	2200.00					MinPt-CICI	
20.02	22.71	4.04	-2.70	1.30	OSF1.50	2210.00	2210.00					MINPT-O-EQU	
20.07	22.79	4.05	-2.71	1.30	OSF1.50	2220.00	2220.00					MinPts	
23.40	23.53	6.88	-0.13	1.49	OSF1.50	2340.00	2340.00			OSF>1.50		Exit Minor	
80.48	26.93	62.36	54.55	4.99	OSF1.50	3250.00	3247.87		OSF>5.00			Exit Alert	
249.97	59.65	209.37	190.32	6.50	OSF1.50	9010.00	8994.18					MinPt-CICI	
250.05	60.06	209.16	189.97	6.45	OSF1.50	9070.00	9054.18					MINPT-O-EQU	
250.17	60.23	209.18	189.94	6.44	OSF1.50	9080.00	9074.18					MinPt-O-ADP	
251.31	60.70	210.01	190.02	6.41	OSF1.50	9150.00	9134.18					MinPt-O-SF	
454.65	138.47	381.70	316.37	4.99	OSF1.50	13420.00	9830.00		OSF<5.00			Enter Alert	
454.85	168.91	346.08	298.94	4.34	OSF1.50	14098.21	9830.00					MinPts	

Survey Cimarex Triste Draw 25
Federal #7H MWD 08 to Survey
Cimarex Triste Draw 25 Federal
#7H MWD 08 to 14577ft (Def
Survey)

1518.97	32.81	1518.47	1486.18	N/A	MAS = 10.00 (m)	0.00	0.00					MinPts	Warning Alert
1518.99	32.81	1518.48	1486.18	157821.17	MAS = 10.00 (m)	26.00	26.00					WRP	
1519.02	32.81	1518.47	1486.21	32308.33	MAS = 10.00 (m)	40.00	40.00					MINPT-O-EQU	
1528.43	32.81	1518.10	1495.05	194.31	MAS = 10.00 (m)	1820.00	1820.00					MinPts	
1528.45	32.81	1517.32	1495.05	178.68	MAS = 10.00 (m)	2000.00	2000.00					MinPts	
1528.51	32.81	1516.34	1495.70	142.90	MAS = 10.00 (m)	2450.00	2450.00					MinPts	
1528.64	32.81	1515.13	1495.75	138.85	MAS = 10.00 (m)	2510.00	2510.00					MINPT-O-EQU	
1530.33	32.81	1516.72	1497.52	137.81	MAS = 10.00 (m)	2800.00	2599.98					MinPt-O-SF	
1546.96	32.81	1535.28	1518.16	138.08	MAS = 10.00 (m)	2850.00	2848.28					MinPt-O-SF	
1653.92	35.42	1628.48	1618.51	75.26	OSF1.50	6600.00	6584.27					MinPt-O-SF	
1303.54	60.80	1288.94	1252.74	40.80	OSF1.50	9090.00	9074.18					MinPts	
1012.65	68.80	990.80	945.85	24.01	OSF1.50	10180.00	9830.00					MinPt-CICI	
950.31	177.98	830.30	772.35	8.15	OSF1.50	12450.00	9830.00					MinPt-CICI	
950.38	178.18	830.33	772.21	8.14	OSF1.50	12470.00	9830.00					MINPT-O-EQU	
974.50	299.30	773.73	675.21	4.93	OSF1.50	14080.00	9830.00		OSF<5.00			Enter Alert	
974.64	311.16	785.92	683.48	4.74	OSF1.50	14098.21	9830.00					MinPts	

Cimarex Triste Draw 25 Federal
#13H MWD to 13,778ft MD TD
(Surcon Cor) (Def Survey)

118.58	32.81	114.08	83.77	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	Pass
118.69	32.81	114.05	83.76	18780.10	MAS = 10.00 (m)	26.00	26.00					WRP	
105.87	32.81	98.48	72.87	15.42	MAS = 10.00 (m)	1580.00	1580.00					MinPts	
107.09	32.81	95.52	74.28	11.51	MAS = 10.00 (m)	2090.00	2090.00					MINPT-O-EQU	
95.85	32.81	81.71	62.87	8.12	MAS = 10.00 (m)	3050.00	3048.47					MinPts	
95.85	32.81	81.84	63.04	8.11	MAS = 10.00 (m)	3080.00	3078.35					MinPt-O-SF	
120.23	32.81	104.95	87.42	9.21	MAS = 10.00 (m)	3880.00	3875.13					MinPt-O-SF	
130.04	32.81	113.78	97.23	9.27	MAS = 10.00 (m)	4240.00	4233.68					MinPt-O-SF	
134.95	32.81	118.05	102.15	9.15	MAS = 10.00 (m)	4480.00	4452.79					MinPt-O-SF	
658.97	48.05	524.10	508.91	18.26	OSF1.50	9300.00	9284.18					MinPt-O-ADP	
500.66	48.85	527.26	511.81	18.05	OSF1.50	9450.00	9433.77					MinPt-O-SF	
500.37	58.54	529.51	510.83	15.17	OSF1.50	10500.00	9830.00					MinPt-CICI	
558.62	83.61	501.94	474.91	10.28	OSF1.50	11550.00	9830.00					MinPt-CICI	
500.08	87.83	500.89	472.25	9.80	OSF1.50	11710.00	9830.00					MINPT-O-EQU	
563.93	95.24	499.90	468.09	9.08	OSF1.50	11880.00	9830.00					MINPT-O-EQU	
500.44	101.73	497.70	484.71	8.62	OSF1.50	12220.00	9830.00					MinPt-CICI	
690.72	111.14	494.52	458.58	7.83	OSF1.50	12580.00	9830.00					MINPT-O-EQU	
673.38	121.82	491.33	451.66	7.18	OSF1.50	12940.00	9830.00					MINPT-O-EQU	
578.62	143.31	480.15	433.21	6.11	OSF1.50	13690.00	9830.00					MinPt-CICI	
577.83	155.31	473.55	422.62	5.65	OSF1.50	14098.21	9830.00					MinPts	

Cimarex Triste Draw 26 Federal
#12H survey trail (Def Survey)

134.16	32.81	131.68	101.35	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	Pass
134.14	32.81	131.64	101.33	29141.87	MAS = 10.00 (m)	26.00	26.00					WRP	
124.16	32.81	115.84	81.37	20.15	MAS = 10.00 (m)	1420.00	1420.00					MinPts	
124.24	32.81	115.57	81.44	19.72	MAS = 10.00 (m)	1450.00	1450.00					MINPT-O-EQU	
142.75	32.81	128.77	106.94	12.22	MAS = 10.00 (m)	2800.00	2599.98					MinPt-O-SF	
243.50	32.81	228.86	210.69	17.04	MAS = 10.00 (m)	4280.00	4253.60					MinPt-O-SF	
248.71	32.81	231.77	215.90	17.05	MAS = 10.00 (m)	4380.00	4353.20					MinPt-O-SF	
262.80	32.81	272.67	259.99	18.47	MAS = 10.00 (m)	5210.00	5199.77					MinPt-O-SF	

Cimarex Triste Draw 25 Federal #15H Rev1 RM 09May19 Proposal Geodetic Report

(Def Plan)



Report Date: May 09, 2019 - 03:11 PM
 Client: Cimarex
 Field: NM Lea County (NAD 83)
 Structure / Slot: Cimarex Triste Draw 25 Federal #15H / Cimarex Triste Draw 25 Federal #15H
 Well: Cimarex Triste Draw 25 Federal #15H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Cimarex Triste Draw 25 Federal #15H Rev1 RM 09May19
 Survey Date: May 09, 2019
 Tort / AMD / DDI / ERD Ratio: 100.291 * / 4815.459 ft / 5.840 / 0.490
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 16' 11.39506", W 103° 37' 43.98707"
 Location Grid N/E Y/X: N 482612.530 RUS, E 759068.420 RUS
 CRS Grid Convergence Angle: 0.3761 *
 Grid Scale Factor: 0.99998339
 Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 359.591 * (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3715.900 ft above MSL
 Seabed / Ground Elevation: 3689.900 ft above MSL
 Magnetic Declination: 6.707 *
 Total Gravity Field Strength: 998.4385mgn (9.80685 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 47955.887 nT
 Magnetic Dip Angle: 59.961 *
 Declination Date: May 09, 2019
 Magnetic Declination Model: HDGM 2019
 North Reference: Grid North
 Grid Convergence Used: 0.3761 *
 Total Corr Mag North->Grid: 6.3310 *
 North: Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL [500' FSL, 2470' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	100.00	0.00	269.42	100.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	200.00	0.00	269.42	200.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	300.00	0.00	269.42	300.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	400.00	0.00	269.42	400.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	500.00	0.00	269.42	500.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	600.00	0.00	269.42	600.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	700.00	0.00	269.42	700.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	800.00	0.00	269.42	800.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	900.00	0.00	269.42	900.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1000.00	0.00	269.42	1000.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1100.00	0.00	269.42	1100.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1200.00	0.00	269.42	1200.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
Rustler	1240.00	0.00	269.42	1240.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1300.00	0.00	269.42	1300.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1400.00	0.00	269.42	1400.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1500.00	0.00	269.42	1500.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1600.00	0.00	269.42	1600.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1700.00	0.00	269.42	1700.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
Top of Salt (Salado)	1730.00	0.00	269.42	1730.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1800.00	0.00	269.42	1800.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	1900.00	0.00	269.42	1900.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	2000.00	0.00	269.42	2000.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	2100.00	0.00	269.42	2100.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	2200.00	0.00	269.42	2200.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	2300.00	0.00	269.42	2300.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	2400.00	0.00	269.42	2400.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
Nudge 2"/100' DLS	2500.00	0.00	269.42	2500.00	0.00	0.00	0.00	0.00	482612.53	759068.42	N 32 16 11.40	W 103 37 43.99
	2600.00	2.00	269.42	2599.98	-0.01	-0.02	-1.75	2.00	482612.51	759068.88	N 32 16 11.40	W 103 37 44.01
	2700.00	4.00	269.42	2699.84	-0.02	-0.07	-6.98	2.00	482612.46	759061.44	N 32 16 11.39	W 103 37 44.07
Hold Nudge	2757.28	5.15	269.42	2759.93	-0.04	-0.12	-11.54	2.00	482612.41	759056.88	N 32 16 11.39	W 103 37 44.12
	2800.00	5.15	269.42	2799.48	-0.05	-0.16	-15.38	0.00	482612.37	759053.04	N 32 16 11.39	W 103 37 44.17
	2900.00	5.15	269.42	2899.08	-0.07	-0.25	-24.34	0.00	482612.28	759044.08	N 32 16 11.39	W 103 37 44.27
	3000.00	5.15	269.42	2898.88	-0.10	-0.34	-33.31	0.00	482612.19	759035.11	N 32 16 11.39	W 103 37 44.38
	3100.00	5.15	269.42	3098.27	-0.13	-0.43	-42.28	0.00	482612.10	759026.14	N 32 16 11.39	W 103 37 44.48
	3200.00	5.15	269.42	3197.67	-0.16	-0.52	-51.25	0.00	482612.01	759017.17	N 32 16 11.39	W 103 37 44.58
	3300.00	5.15	269.42	3297.47	-0.18	-0.61	-60.22	0.00	482611.92	759008.21	N 32 16 11.39	W 103 37 44.69
	3400.00	5.15	269.42	3397.06	-0.21	-0.71	-69.19	0.00	482611.82	758999.24	N 32 16 11.39	W 103 37 44.79
	3500.00	5.15	269.42	3496.66	-0.24	-0.80	-78.15	0.00	482611.73	758990.27	N 32 16 11.39	W 103 37 44.90
	3600.00	5.15	269.42	3596.26	-0.27	-0.89	-87.12	0.00	482611.64	758981.30	N 32 16 11.39	W 103 37 45.00
	3700.00	5.15	269.42	3695.86	-0.29	-0.98	-96.09	0.00	482611.55	758972.33	N 32 16 11.39	W 103 37 45.11
	3800.00	5.15	269.42	3795.45	-0.32	-1.07	-105.06	0.00	482611.46	758963.37	N 32 16 11.39	W 103 37 45.21
	3900.00	5.15	269.42	3895.05	-0.35	-1.16	-114.03	0.00	482611.37	758954.40	N 32 16 11.39	W 103 37 45.32
	4000.00	5.15	269.42	3994.65	-0.38	-1.25	-122.99	0.00	482611.28	758945.43	N 32 16 11.39	W 103 37 45.42
	4100.00	5.15	269.42	4094.24	-0.40	-1.35	-131.96	0.00	482611.18	758936.46	N 32 16 11.39	W 103 37 45.52
	4200.00	5.15	269.42	4193.84	-0.43	-1.44	-140.93	0.00	482611.09	758927.49	N 32 16 11.39	W 103 37 45.63
	4300.00	5.15	269.42	4293.44	-0.46	-1.53	-149.90	0.00	482611.00	758918.53	N 32 16 11.39	W 103 37 45.73
	4400.00	5.15	269.42	4393.03	-0.49	-1.62	-158.87	0.00	482610.91	758909.56	N 32 16 11.39	W 103 37 45.84
	4500.00	5.15	269.42	4492.63	-0.51	-1.71	-167.84	0.00	482610.82	758900.59	N 32 16 11.39	W 103 37 45.94
	4600.00	5.15	269.42	4592.23	-0.54	-1.80	-176.80	0.00	482610.73	758891.62	N 32 16 11.39	W 103 37 46.05
	4700.00	5.15	269.42	4691.83	-0.57	-1.89	-185.77	0.00	482610.64	758882.66	N 32 16 11.39	W 103 37 46.15
	4800.00	5.15	269.42	4791.42	-0.59	-1.99	-194.74	0.00	482610.55	758873.69	N 32 16 11.39	W 103 37 46.26
Base of Salt	4808.61	5.15	269.42	4800.00	-0.60	-1.99	-195.51	0.00	482610.54	758872.61	N 32 16 11.39	W 103 37 46.26
	4900.00	5.15	269.42	4891.02	-0.62	-2.08	-203.71	0.00	482610.45	758864.72	N 32 16 11.39	W 103 37 46.38
	5000.00	5.15	269.42	4982.02	-0.65	-2.17	-212.68	0.00	482610.36	758855.75	N 32 16 11.39	W 103 37 46.48
Delaware Sands	5039.54	5.15	269.42	5030.00	-0.66	-2.20	-216.22	0.00	482610.33	758852.21	N 32 16 11.39	W 103 37 46.51
	5100.00	5.15	269.42	5090.21	-0.68	-2.26	-221.65	0.00	482610.27	758846.78	N 32 16 11.39	W 103 37 46.57
	5200.00	5.15	269.42	5189.81	-0.70	-2.35	-230.61	0.00	482610.18	758837.82	N 32 16 11.39	W 103 37 46.67
	5300.00	5.15	269.42	5289.41	-0.73	-2.44	-239.58	0.00	482610.09	758828.85	N 32 16 11.39	W 103 37 46.78
	5400.00	5.15	269.42	5389.00	-0.76	-2.53	-248.55	0.00	482610.00	758819.88	N 32 16 11.39	W 103 37 46.88
	5500.00	5.15	269.42	5488.60	-0.79	-2.62	-257.52	0.00	482609.91	758810.91	N 32 16 11.39	W 103 37 46.99
	5600.00	5.15	269.42	5588.20	-0.81	-2.72	-266.49	0.00	482609.81	758801.94	N 32 16 11.39	W 103 37 47.09
	5700.00	5.15	269.42	5687.80	-0.84	-2.81	-275.45	0.00	482609.72	758792.98	N 32 16 11.39	W 103 37 47.20
	5800.00	5.15	269.42	5787.39	-0.87	-2.90	-284.42	0.00	482609.63	758784.01	N 32 16 11.38	W 103 37 47.30
	5900.00	5.15	269.42	5886.99	-0.90	-2.99	-293.39	0.00	482609.54	758775.04	N 32 16 11.38	W 103 37 47.40

Comments	MD (ft)	Incl (°)	Azimuth (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6000.00	5.15	289.42	5988.59	-0.92	-3.08	-302.38	0.00	462608.45	758706.07	N 32 16 11.38 W 103 37 47.51	
	8100.00	5.15	289.42	6086.18	-0.95	-3.17	-311.33	0.00	462609.36	758757.10	N 32 16 11.38 W 103 37 47.81	
	8200.00	5.15	289.42	6185.78	-0.98	-3.26	-320.30	0.00	462609.27	758748.14	N 32 16 11.38 W 103 37 47.72	
	8300.00	5.15	289.42	6285.38	-1.01	-3.36	-329.26	0.00	462609.17	758739.17	N 32 16 11.38 W 103 37 47.82	
	8400.00	5.15	289.42	6384.97	-1.03	-3.45	-338.23	0.00	462609.08	758730.20	N 32 16 11.38 W 103 37 47.93	
	8500.00	5.15	289.42	6484.57	-1.06	-3.54	-347.20	0.00	462608.99	758721.23	N 32 16 11.38 W 103 37 48.03	
Drop to Vertical 2"/100' DLS	8515.49	5.15	289.42	6500.00	-1.06	-3.55	-348.59	0.00	462608.98	758719.84	N 32 16 11.38 W 103 37 48.05	
	8600.00	3.48	289.42	6584.27	-1.08	-3.62	-354.93	2.00	462608.91	758713.51	N 32 16 11.38 W 103 37 48.12	
	8700.00	1.48	289.42	6684.17	-1.10	-3.66	-359.21	2.00	462608.87	758709.22	N 32 16 11.38 W 103 37 48.17	
Hold Vertical	8772.77	0.00	289.42	6756.93	-1.10	-3.67	-360.13	2.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8800.00	0.00	289.42	6784.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8900.00	0.00	289.42	6884.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9000.00	0.00	289.42	6984.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9100.00	0.00	289.42	7084.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9200.00	0.00	289.42	7184.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9300.00	0.00	289.42	7284.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
Brushy Canyon	9375.84	0.00	289.42	7380.00	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9400.00	0.00	289.42	7384.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9500.00	0.00	289.42	7484.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9600.00	0.00	289.42	7584.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9700.00	0.00	289.42	7684.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9800.00	0.00	289.42	7784.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9900.00	0.00	289.42	7884.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	10000.00	0.00	289.42	7984.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8100.00	0.00	289.42	8084.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8200.00	0.00	289.42	8184.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8300.00	0.00	289.42	8284.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8400.00	0.00	289.42	8384.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8500.00	0.00	289.42	8484.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8600.00	0.00	289.42	8584.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8700.00	0.00	289.42	8684.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8800.00	0.00	289.42	8784.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
Bone Spring	8845.84	0.00	289.42	8830.00	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	8900.00	0.00	289.42	8884.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9000.00	0.00	289.42	8984.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9100.00	0.00	289.42	9084.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9200.00	0.00	289.42	9184.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9300.00	0.00	289.42	9284.16	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
Avalon Shale KOP - Build 12"/100' DLS	9335.84	0.00	289.42	9320.00	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9368.37	0.00	289.42	9352.54	-1.10	-3.67	-360.13	0.00	462608.86	758708.30	N 32 16 11.38 W 103 37 48.18	
	9400.00	3.80	359.59	9384.14	-0.05	-2.82	-369.14	12.00	462609.91	758708.29	N 32 16 11.39 W 103 37 48.18	
	9500.00	15.80	359.59	9482.50	16.93	14.38	-369.26	12.00	462626.89	758708.17	N 32 16 11.56 W 103 37 48.18	
	9600.00	27.80	359.59	9575.18	53.99	51.42	-369.53	12.00	462663.95	758707.91	N 32 16 11.93 W 103 37 48.18	
	9700.00	39.80	359.59	9658.14	109.51	108.94	-369.92	12.00	462719.46	758707.51	N 32 16 12.48 W 103 37 48.18	
	9800.00	51.80	359.59	9727.73	181.07	178.49	-381.43	12.00	462791.01	758707.00	N 32 16 13.18 W 103 37 48.18	
	9900.00	63.80	359.59	9780.93	265.53	262.95	-382.04	12.00	462875.47	758706.40	N 32 16 14.02 W 103 37 48.18	
	10000.00	75.80	359.59	9815.40	359.20	356.62	-382.71	12.00	462989.14	758705.73	N 32 16 14.95 W 103 37 48.18	
	10100.00	87.80	359.59	9829.65	458.00	455.41	-383.41	12.00	463067.93	758705.02	N 32 16 15.92 W 103 37 48.18	
Avalon Target Landing Point	10118.37	90.00	359.59	9830.00	478.36	473.78	-383.54	12.00	463086.29	758704.89	N 32 16 16.11 W 103 37 48.18	
	10200.00	90.00	359.59	9830.00	557.99	555.41	-384.12	0.00	463167.92	758704.31	N 32 16 16.91 W 103 37 48.19	
	10300.00	90.00	359.59	9830.00	657.99	655.40	-384.84	0.00	463267.91	758703.60	N 32 16 17.90 W 103 37 48.19	
	10400.00	90.00	359.59	9830.00	757.99	755.40	-385.55	0.00	463367.90	758702.88	N 32 16 18.89 W 103 37 48.19	
	10500.00	90.00	359.59	9830.00	857.99	855.40	-386.27	0.00	463467.90	758702.17	N 32 16 19.88 W 103 37 48.19	
	10600.00	90.00	359.59	9830.00	957.99	955.40	-386.98	0.00	463567.89	758701.45	N 32 16 20.87 W 103 37 48.19	
	10700.00	90.00	359.59	9830.00	1057.99	1055.39	-387.69	0.00	463667.88	758700.74	N 32 16 21.86 W 103 37 48.19	
	10800.00	90.00	359.59	9830.00	1157.99	1155.39	-388.41	0.00	463767.88	758700.03	N 32 16 22.85 W 103 37 48.19	
	10900.00	90.00	359.59	9830.00	1257.99	1255.39	-389.12	0.00	463867.87	758699.31	N 32 16 23.84 W 103 37 48.19	
	11000.00	90.00	359.59	9830.00	1357.99	1355.39	-389.84	0.00	463967.86	758698.60	N 32 16 24.83 W 103 37 48.19	
	11100.00	90.00	359.59	9830.00	1457.99	1455.38	-390.55	0.00	464067.86	758697.89	N 32 16 25.82 W 103 37 48.19	
	11200.00	90.00	359.59	9830.00	1557.99	1555.38	-391.26	0.00	464167.85	758697.17	N 32 16 26.81 W 103 37 48.19	
	11300.00	90.00	359.59	9830.00	1657.99	1655.38	-391.98	0.00	464267.85	758696.46	N 32 16 27.80 W 103 37 48.19	
	11400.00	90.00	359.59	9830.00	1757.99	1755.38	-392.69	0.00	464367.84	758695.74	N 32 16 28.79 W 103 37 48.19	
	11500.00	90.00	359.59	9830.00	1857.99	1855.37	-393.40	0.00	464467.83	758695.03	N 32 16 29.78 W 103 37 48.19	
	11600.00	90.00	359.59	9830.00	1957.99	1955.37	-394.12	0.00	464567.83	758694.32	N 32 16 30.77 W 103 37 48.19	
	11700.00	90.00	359.59	9830.00	2057.99	2055.37	-394.83	0.00	464667.82	758693.60	N 32 16 31.76 W 103 37 48.20	
	11800.00	90.00	359.59	9830.00	2157.99	2155.37	-395.55	0.00	464767.81	758692.89	N 32 16 32.75 W 103 37 48.20	
	11900.00	90.00	359.59	9830.00	2257.99	2255.36	-396.26	0.00	464867.81	758692.18	N 32 16 33.74 W 103 37 48.20	
	12000.00	90.00	359.59	9830.00	2357.99	2355.36	-396.97	0.00	464967.80	758691.48	N 32 16 34.73 W 103 37 48.20	
	12100.00	90.00	359.59	9830.00	2457.99	2455.36	-397.69	0.00	465067.79	758690.75	N 32 16 35.72 W 103 37 48.20	
	12200.00	90.00	359.59	9830.00	2557.99	2555.36	-398.40	0.00	465167.79	758690.03	N 32 16 36.70 W 103 37 48.20	
	12300.00	90.00	359.59	9830.00	2657.99	2655.35	-399.11	0.00	465267.78	758689.32	N 32 16 37.69 W 103 37 48.20	
	12400.00	90.00	359.59	9830.00	2757.99	2755.35	-399.83	0.00	465367.78	758688.61	N 32 16 38.68 W 103 37 48.20	
	12500.00	90.00	359.59	9830.00	2857.99	2855.35	-400.54	0.00	465467.77	758687.89	N 32 16 39.67 W 103 37 48.20	
	12600.00	90.00	359.59	9830.00	2957.99	2955.35	-401.26	0.00	465567.76	758687.18	N 32 16 40.66 W 103 37 48.20	
	12700.00	90.00	359.59	9830.00	3057.99	3055.34	-401.97	0.00	465667.76	758686.47	N 32 16 41.65 W 103 37 48.20	
	12800.00	90.00	359.59	9830.00	3157.99	3155.34	-402.68	0.00	465767.75	758685.75	N 32 16 42.64 W 103 37 48.20	
	12900.00	90.00	359.59	9830.00	3257.99	3255.34	-403.40	0.00	465867.74	758685.04	N 32 16 43.63 W 103 37 48.20	
	13000.00	90.00										

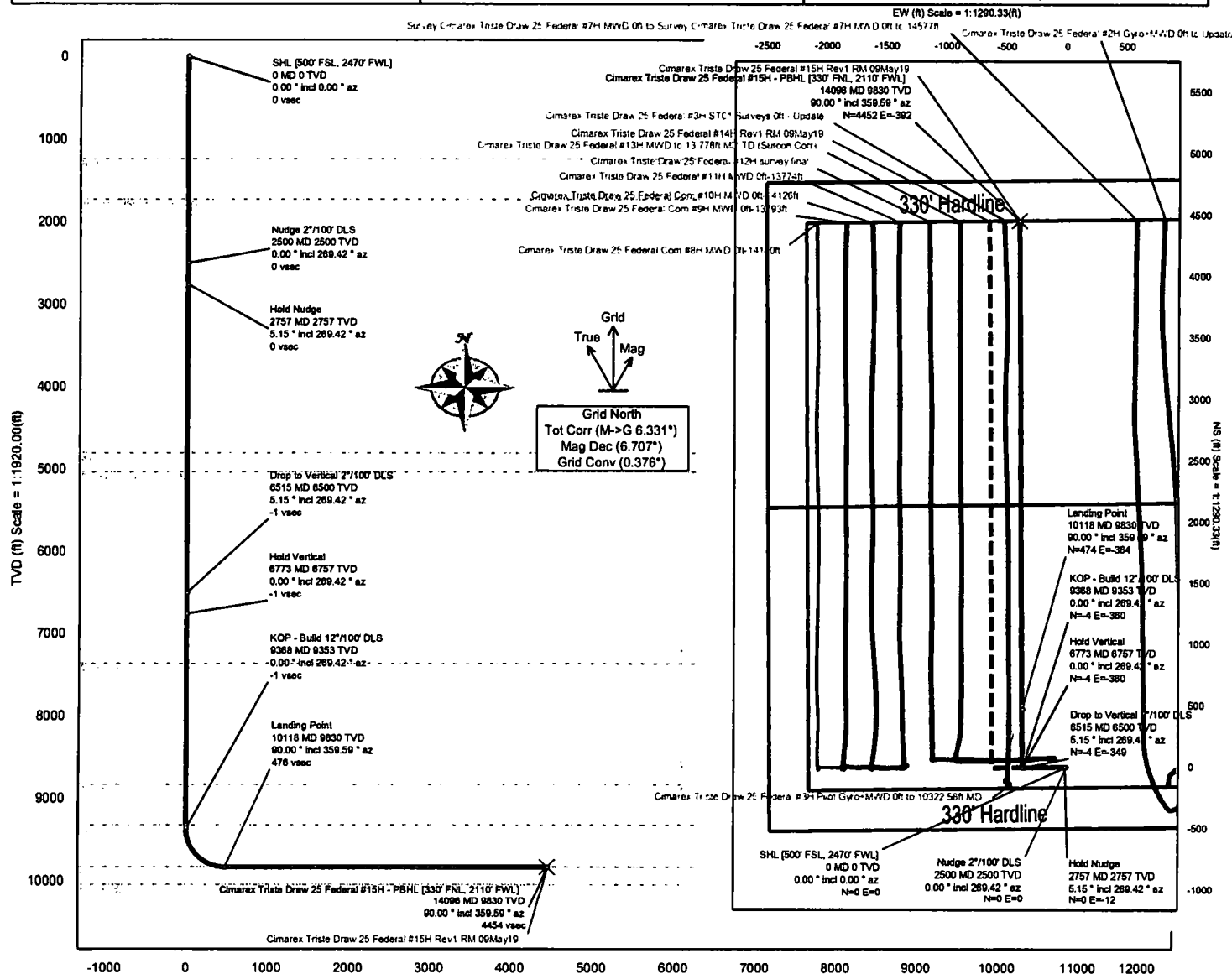
Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
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Survey Type: Def Plan

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	26.000	1/100.000	30.000	30.000		NAL_MWD_IFR1+MS-Depth Only	Original Borehole / Cimarex Triste Draw 25 Federal #15H Rev1 RM 09May19
	1	26.000	14096.214	1/100.000	30.000	30.000		NAL_MWD_IFR1+MS	Original Borehole / Cimarex Triste Draw 25 Federal #15H Rev1 RM

Borehole:		Well:		Field:		Structure:	
Original Borehole		Cimarex Triste Draw 25 Federal #15H		NM Lea County (NAD 83)		Cimarex Triste Draw 25 Federal #15H	
Gravity & Magnetic Parameters				Surface Location		Miscellaneous	
Model: HDGM 2010 Dip: 69.961° Date: 08-May-2019				NAD83 New Mexico State Plane, Eastern Zone, US Feet		Cimarex Triste	
MagDec: 6.707° FB: 47955.867m Gravity FB: 988.436mgn (8.80683 Based)				Lat: N 32 16 11.40 Northing: 482912.631US Grid Conv: 0.3761°		Shot: Draw 25 Federal TVD Ref: RKB(2715.99 above MSL)	
				Lon: W 103 37 43.89 Easting: 758095.421US Scale Fact: 0.80993339		Plan: Cimarex Triste Draw 25 Federal #15H Rev1 RM 09May19	



Vertical Section (ft) Azim = 359.59° Scale = 1:1920.00(R) Origin = 0N/S, 0E/W

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [500' FSL, 2470' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rustler	1240.00	0.00	269.42	1240.00	0.00	0.00	0.00	0.00
Top of Salt (Salado)	1730.00	0.00	269.42	1730.00	0.00	0.00	0.00	0.00
Nudge 2°/100' DLS	2500.00	0.00	269.42	2500.00	0.00	0.00	0.00	0.00
Hold Nudge	2757.28	5.15	269.42	2756.93	-0.04	-0.12	-11.54	2.00
Base of Salt	4808.61	5.15	269.42	4800.00	-0.80	-1.99	-195.51	0.00
Delaware Sands	5039.54	5.15	269.42	5030.00	-0.88	-2.20	-218.22	0.00
Drop to Vertical 2°/100' DLS	6515.49	5.15	269.42	6500.00	-1.06	-3.55	-348.59	0.00
Hold Vertical	6772.77	0.00	269.42	6756.93	-1.10	-3.67	-380.13	2.00
Brushy Canyon	7375.84	0.00	269.42	7360.00	-1.10	-3.67	-380.13	0.00
Bone Spring	8845.64	0.00	269.42	8830.00	-1.10	-3.67	-380.13	0.00
Avalon Shale	9335.64	0.00	269.42	9320.00	-1.10	-3.67	-380.13	0.00
KOP - Build 12°/100' DLS	9368.37	0.00	269.42	9352.54	-1.10	-3.67	-380.13	0.00
Landing Point	10116.37	90.00	359.59	9830.00	476.38	473.78	-363.54	12.00
Avalon Target	10118.37	90.00	359.59	9830.00	476.38	473.78	-363.54	12.00
Cimarex Triste Draw 25 Federal #15H - PBHL [330° FNL, 2110° FWL]	14096.21	90.00	359.59	9830.00	4454.21	4451.52	-391.94	0.00
1st Bone Spring Sand	NaN			10040.00				