

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNMOCD
HOBBS OGD
HOBBS

DEC 04 2019

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010WELL COMPLETION OR RECOMPLETION REPORT AND LOG
RECEIVED

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. NMNM01917	
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other _____		6. If Indian, Allottee or Tribe Name	
2. Name of Operator CIMAREX ENERGY COMPANY		Contact: FATIMA VASQUEZ E-Mail: fvasquez@cimarex.com	
3. Address 600 N MARIENFELD ST SUITE 600 MIDLAND, TX 79701		3a. Phone No. (include area code) Ph: 432.620.1933	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* Sec 11 T24S R32E Mer At surface NWNW 530FNL 370FWL 32.237944 N Lat, 103.652759 W Lon At top prod interval reported below Sec 14 T24S R32E Mer At total depth SWSW 101FSL 328FWL		8. Lease Name and Well No. DOS EQUIS 11 14 FEDERAL COM 4H	
14. Date Spudded 01/22/2019		15. Date T.D. Reached 02/25/2019	
16. Date Completed ☐ D & A ☒ Ready to Prod. 07/12/2019		17. Elevations (DF, KB, RT, GL)* 3632 GL	
18. Total Depth: MD 21967 TVD 12367		19. Plug Back T.D.: MD 21895 TVD 12366	
20. Depth Bridge Plug Set: MD TVD		21. Type Electric & Other Mechanical Logs Run (Submit copy of each) RCBL-GAMMA	
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit analysis)			

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
9.875				13100					
14.750	10.750 J-55	40.5	0	1224		1030		0	
6.750	5.500 HCP110	23.0	0	11696					
8.750	7.625 HCL-80	29.7	0	12508		1320		0	
6.750	5.000 HCP110	18.0	11696	21967		1255		10900	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	12119		12703 TO 21868	0.400	1232	PRODUCING
B)						
C)						
D)						

26. Perforation Record

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
12703 TO 21868	443,601 BBLs TOTAL FLUID & 21,993,652# SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
07/12/2019	07/17/2019	24	→	1064.0	3038.0	2443.0	45.9		FLOW FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
22	SI	4171.0	→	1064	3038	2443	2855		POW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	SI		→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #481455 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

Reclamation due: 01/12/2020

BUREAU OF LAND MANAGEMENT
ROB WEL FIELD OFFICE

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
RUSTLER	1051	1051	DOLOMITE/ANHYDRITE: WATER	RUSTLER	1051
TOP OF SALT	1372	1372	SALT:BARREN	TOP OF SALT	1372
BELL CANYON	4948	4948	SANDSTONE: WATER	BELL CANYON	4948
CHERRY CANYON	5855	5855	SANDSTONE: WATER	CHERRY CANYON	5855
BRUSHY CANYON	7327	7327	SANDSTONE: WATER	BRUSHY CANYON	7327
TOP OF BONE SPRING	8818	8818	LIMESTONE: WATER	TOP OF BONE SPRING	8818
AVALON	9297	9297	SHALE: OIL, WATER, GAS	AVALON	9297
WOLFCAMP	12119	12119	SHALE/SANDSTONE:OIL,WATER,GAS	WOLFCAMP	12119

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7 Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #481455 Verified by the BLM Well Information System.
For CIMAREX ENERGY COMPANY, sent to the Hobbs
Committed to AFMSS for processing by JENNIFER SANCHEZ on 11/18/2019 ()

Name (please print) FATIMA VASQUEZTitle REGULATORY ANALYSTSignature (Electronic Submission)Date 08/30/2019

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

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 30-025-45413	² Pool Code 98309	³ Pool Name WC-025 G-08 S243213C; Wolfcamp.
⁴ Property Code 322999	⁵ Property Name DOS EQUIS 11-14 FEDERAL COM	⁶ Well Number 4H
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁹ Elevation 3631.6'

^{1a}Surface Location

UL or lot no. D	Section 11	Township 24S	Range 32E	Lot 14	Feet from the 530	North/South line NORTH	Feet from the 370	East/West line WEST	County LEA
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"Bottom Hole Location If Different From Surface

U1, or lot no. M	Section 14	Township 24S	Range 32E	Lat 1dn	Feet from the 101	North/South line SOUTH	Feet from the 328	East/West line WEST	County LEA
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11 Dedicated Acres 320	12 Joint or Infill	13 Consolidation Code	14 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.

NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Plan of Bearing is a Transverse Mercator Projection with a Central Meridian of W101°53'00"

NAD 83 (SURFACE HOLE LOCATION)

LATITUDE = 31°14'16.60" (31.237914°)

LONGITUDE = 101°39'09.91" (101.652759°)

NAD 83 (SURFACE HOLE LOCATION)

LATITUDE = 32°14'16.13" (32.237810°)

LONGITUDE = 101°39'08.20" (101.652718°)

STATE PLANE NAD83 (N.E. EAST)

N: 43694.24' E: 71163.04'

STATE PLANE NAD83 (N.E. EAST)

N: 43690.127' E: 710579.08'

SCALE

REV: 2 12-18-18 C.M.T. (PAD MOVE)

Section 11:

- Top boundary: N89°32'55"E 2650.72' (Meas.)
- Right boundary: N00°06'07"W 2641.92' (Meas.)
- Bottom boundary: N00°20'42"W 2621.97' (Meas.)
- Left boundary: N00°11'33"W 2640.97' (Meas.)

Section 14:

- Top boundary: N89°35'30"W 5297.85' (Meas.)
- Right boundary: N00°05'21"W 2641.81' (Meas.)
- Bottom boundary: N00°00'59"W 5283.62' (Meas.)
- Left boundary: N00°06'39"W 2639.56' (Meas.)

Other Features:

- SHL (Surface Hole Location) at NW corner of Section 11.
- L1 (Landing Point/First Take Point) at NW corner of Section 14.
- SHL (Surface Hole Location) at NE corner of Section 14.
- Re-Established by Double Proportion at NW corner of Section 11.
- Re-Established by Double Proportion at NW corner of Section 14.
- Re-Established by Single Proportion at NE corner of Section 14.

Detail "A"

No Scale

"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 an undivided interest in the land including the proposed bottom hole location or has a right to drill this well on 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.

Signature: _____ Date: 7/22/2019

Fatima Vasquez

Printed Name

fvasquez@cimarex.com

E-mail Address

"SURVEYOR CERTIFICATION"

I hereby certify that the well location shown on this plat was plotted from field notes of actual survey made by me or under my supervision, and that the same is true and correct to the best of my belief.

December 12, 2018

Date of Survey

Signature and Seal of Professional Surveyor:

PAUL BUCHELE

NEW MEXICO

12-18-18

PROFESSIONAL SURVEYOR

Certificate Number:



Final Surveys - Cimarex Dos Equis 11-14 Federal Com 4H ST01 MWD 0ft-
21967 Survey Geodetic Report
(Def Survey)



Report Date: March 05, 2019 - 04:58 PM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex Dos Equis 11-14 Federal Com 4H / Cimarex Dos Equis 11-14 Federal Com 4H
Well: Cimarex Dos Equis 11-14 Federal Com 4H
Borehole: ST01
UWI / API#: Unknown / Unknown
Survey Name: Final Surveys - Cimarex Dos Equis 11-14 Federal Com 4H ST01 MWD 0ft-21967
Survey Date: January 18, 2019
Tort / AHD / DDI / ERD Ratio: 239.663 * / 10054.432 ft / 6.631 / 0.813
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 14' 16.59813", W 103° 39' 9.93101"
Location Grid N/E Y/X: N 450964.240 ftUS, E 751763.040 ftUS
CRS Grid Convergence Angle: 0.3631 *
Grid Scale Factor: 0.9995598
Version / Patch: 2.10.753.0
Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.645 * (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3657.600 ft above MSL
Seabed / Ground Elevation: 3631.600 ft above MSL
Magnetic Declination: 6.728 *
Total Gravity Field Strength: 998.4343mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47948.343 nT
Magnetic Dip Angle: 59.920 *
Declination Date: February 21, 2019
Magnetic Declination Model: HDGM 2019
North Reference: Grid North
Grid Convergence Used: 0.3631 *
Total Corr Mag North->Grid North: 6.3647 *
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (*100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S * '' ''')	Longitude (E/W * '' ''')	Closure Azimuth (°)	Closure (ft)
SHL [530' FNL, 370' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	450964.24	751763.04	N 32 14 16.60	W 103 39 9.93	0.00	0.00
	201.00	0.47	278.05	201.00	-0.12	0.12	-0.82	0.23	450964.36	751762.22	N 32 14 16.60	W 103 39 9.94	278.05	0.82
	391.00	0.48	242.95	390.99	0.12	-0.14	-2.30	0.15	450964.10	751760.74	N 32 14 16.60	W 103 39 9.96	266.58	2.30
	483.00	0.49	245.09	482.99	0.46	-0.48	-3.00	0.02	450963.76	751760.04	N 32 14 16.59	W 103 39 9.97	260.93	3.03
	573.00	0.61	252.53	572.98	0.76	-0.78	-3.80	0.15	450963.46	751759.24	N 32 14 16.59	W 103 39 9.98	258.35	3.88
	663.00	0.74	243.20	662.98	1.16	-1.19	-4.78	0.19	450963.05	751758.26	N 32 14 16.59	W 103 39 9.99	256.01	4.92
	753.00	0.83	245.80	752.97	1.88	-1.72	-5.89	0.11	450962.52	751757.15	N 32 14 16.58	W 103 39 10.00	253.73	6.14
	843.00	0.81	234.04	842.96	2.32	-2.36	-7.00	0.19	450961.88	751756.04	N 32 14 16.58	W 103 39 10.01	251.37	7.39
	933.00	0.82	238.61	932.95	3.02	-3.07	-8.07	0.07	450961.17	751754.97	N 32 14 16.57	W 103 39 10.03	249.17	8.63
	1027.00	1.02	234.72	1026.94	3.84	-3.90	-8.32	0.22	450960.34	751753.72	N 32 14 16.56	W 103 39 10.04	247.29	10.11
	1142.00	1.02	231.54	1141.92	5.08	-5.13	-10.96	0.05	450959.11	751752.08	N 32 14 16.55	W 103 39 10.06	244.92	12.10
	1308.00	0.94	223.95	1307.90	6.95	-7.03	-13.06	0.09	450957.21	751749.98	N 32 14 16.53	W 103 39 10.08	241.71	14.83
	1402.00	0.91	226.90	1401.88	8.01	-8.09	-14.14	0.06	450956.15	751748.90	N 32 14 16.52	W 103 39 10.10	240.21	16.30
	1497.00	1.11	230.96	1496.87	9.09	-9.19	-15.41	0.22	450955.05	751747.63	N 32 14 16.51	W 103 39 10.11	239.19	17.94
	1591.00	1.11	228.10	1590.85	10.27	-10.37	-16.79	0.06	450953.87	751746.25	N 32 14 16.50	W 103 39 10.13	238.30	19.74
	1780.00	1.14	231.13	1779.82	12.65	-12.77	-19.62	0.04	450951.47	751743.42	N 32 14 16.47	W 103 39 10.18	236.93	23.41
	1874.00	1.08	234.80	1873.80	13.74	-13.87	-21.07	0.10	450950.37	751741.97	N 32 14 16.46	W 103 39 10.18	236.64	25.23
	1969.00	1.13	233.01	1968.78	14.81	-14.95	-22.55	0.06	450949.29	751740.49	N 32 14 16.45	W 103 39 10.19	236.46	27.06
	2064.00	1.08	233.73	2063.76	15.90	-16.04	-24.02	0.05	450948.20	751739.02	N 32 14 16.44	W 103 39 10.21	236.26	28.89
	2158.00	0.93	238.72	2157.75	16.81	-16.96	-25.39	0.18	450947.28	751737.65	N 32 14 16.43	W 103 39 10.23	236.25	30.53
	2253.00	0.15	276.89	2252.74	17.19	-17.35	-26.17	0.86	450946.89	751736.87	N 32 14 16.43	W 103 39 10.24	236.46	31.40
	2347.00	0.15	53.48	2346.74	17.10	-17.26	-26.19	0.30	450946.98	751736.85	N 32 14 16.43	W 103 39 10.24	236.61	31.37
	2442.00	0.20	79.48	2441.74	17.00	-17.16	-25.93	0.10	450947.08	751737.11	N 32 14 16.43	W 103 39 10.23	236.51	31.09
	2536.00	0.40	89.01	2535.74	16.96	-17.12	-25.44	0.22	450947.12	751737.60	N 32 14 16.43	W 103 39 10.23	236.06	30.67
	2725.00	0.54	95.33	2724.74	17.05	-17.19	-23.89	0.08	450947.05	751739.15	N 32 14 16.43	W 103 39 10.21	234.26	29.44
	2820.00	0.66	90.26	2819.73	17.10	-17.24	-22.90	0.14	450947.00	751740.14	N 32 14 16.43	W 103 39 10.20	233.03	28.66
	2914.00	0.72	95.24	2913.72	17.16	-17.29	-21.77	0.09	450946.95	751741.27	N 32 14 16.43	W 103 39 10.19	231.54	27.80
	3009.00	0.93	94.46	3008.71	17.28	-17.41	-20.41	0.22	450946.83	751742.63	N 32 14 16.43	W 103 39 10.17	229.54	26.82
	3103.00	1.16	94.08	3102.70	17.42	-17.54	-18.70	0.24	450946.71	751744.34	N 32 14 16.43	W 103 39 10.15	226.84	25.63

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 ° ' '')	Closure Azimuth (°)	Closure (ft)
	3198.00	1.26	93.86	3197.68	17.57	-17.67	-18.70	0.11	450946.57	751746.34	N 32 14 16.42	W 103 39 10.13	223.37	24.31
	3293.00	1.30	93.24	3292.65	17.71	-17.81	-14.58	0.04	450946.44	751748.46	N 32 14 16.42	W 103 39 10.10	219.31	23.01
	3387.00	1.65	94.13	3386.62	17.89	-17.96	-12.17	0.37	450946.28	751750.88	N 32 14 16.42	W 103 39 10.07	214.11	21.69
	3482.00	1.08	84.60	3481.59	17.92	-17.98	-9.91	0.64	450946.26	751753.13	N 32 14 16.42	W 103 39 10.05	208.87	20.53
	3576.00	0.72	74.29	3575.58	17.68	-17.73	-8.46	0.42	450946.51	751754.58	N 32 14 16.42	W 103 39 10.03	205.50	19.65
	3671.00	0.63	74.40	3670.58	17.39	-17.43	-7.38	0.09	450946.81	751755.68	N 32 14 16.43	W 103 39 10.02	202.95	18.93
	3766.00	0.62	87.78	3765.57	17.23	-17.27	-6.36	0.15	450946.97	751756.68	N 32 14 16.43	W 103 39 10.01	200.23	18.41
	3861.00	0.51	98.20	3860.57	17.28	-17.31	-5.43	0.16	450946.93	751757.61	N 32 14 16.43	W 103 39 10.00	197.42	18.14
	3955.00	0.52	107.10	3954.56	17.47	-17.50	-4.61	0.09	450946.74	751758.43	N 32 14 16.43	W 103 39 9.99	194.76	18.09
	4050.00	0.56	119.79	4049.56	17.83	-17.85	-3.80	0.13	450946.39	751759.24	N 32 14 16.42	W 103 39 9.98	192.00	18.25
	4144.00	0.99	124.04	4143.55	18.52	-18.54	-2.72	0.46	450945.70	751760.32	N 32 14 16.41	W 103 39 9.96	188.36	18.74
	4239.00	1.74	129.98	4238.52	19.92	-19.92	-0.94	0.80	450944.32	751762.10	N 32 14 16.40	W 103 39 9.94	182.70	19.95
	4333.00	1.83	132.65	4332.48	21.86	-21.86	1.26	0.13	450942.38	751764.30	N 32 14 16.38	W 103 39 9.92	176.71	21.89
	4428.00	1.59	158.28	4427.43	24.11	-24.09	2.90	0.78	450940.15	751765.94	N 32 14 16.36	W 103 39 9.90	173.13	24.27
	4522.00	2.36	151.74	4521.38	27.02	-26.99	4.35	0.84	450937.25	751767.38	N 32 14 16.33	W 103 39 9.88	170.85	27.34
	4618.00	2.11	158.81	4615.31	30.34	-30.31	5.89	0.40	450933.93	751768.93	N 32 14 16.30	W 103 39 9.86	169.01	30.87
	4711.00	1.27	187.58	4710.27	33.02	-32.98	6.38	1.23	450931.26	751769.42	N 32 14 16.27	W 103 39 9.86	169.05	33.59
	4806.00	1.01	219.40	4805.25	34.71	-34.67	5.71	0.71	450929.57	751768.75	N 32 14 16.25	W 103 39 9.87	170.65	35.14
	4900.00	0.92	226.84	4899.23	35.86	-35.83	4.63	0.16	450928.41	751767.67	N 32 14 16.24	W 103 39 9.88	172.63	36.13
	4995.00	0.91	226.90	4994.22	36.89	-36.87	3.53	0.01	450927.37	751766.57	N 32 14 16.23	W 103 39 9.89	174.54	37.04
	5184.00	0.89	217.02	5183.20	39.07	-39.06	1.55	0.08	450925.18	751764.59	N 32 14 16.21	W 103 39 9.92	177.73	39.10
	5279.00	0.88	219.37	5278.19	40.22	-40.22	0.64	0.04	450924.02	751763.68	N 32 14 16.20	W 103 39 9.93	179.09	40.22
	5373.00	0.93	228.40	5372.18	41.30	-41.30	-0.37	0.13	450922.94	751762.67	N 32 14 16.19	W 103 39 9.94	180.51	41.30
	5468.00	0.97	236.20	5467.16	42.27	-42.28	-1.60	0.18	450921.96	751761.44	N 32 14 16.18	W 103 39 9.95	182.16	42.31
	5563.00	1.03	233.15	5562.15	43.22	-43.24	-2.95	0.08	450921.00	751760.09	N 32 14 16.17	W 103 39 9.97	183.90	43.34
	5657.00	1.02	233.09	5656.13	44.22	-44.25	-4.29	0.01	450919.99	751758.75	N 32 14 16.16	W 103 39 9.98	185.54	44.46
	5752.00	0.99	240.44	5751.12	45.13	-45.16	-5.68	0.14	450919.08	751757.38	N 32 14 16.15	W 103 39 10.00	187.17	45.52
	5846.00	1.01	240.16	5845.10	45.93	-45.97	-7.11	0.02	450918.27	751755.93	N 32 14 16.14	W 103 39 10.02	188.79	46.52
	6036.00	0.97	236.07	6035.08	47.64	-47.71	-9.89	0.04	450916.54	751753.15	N 32 14 16.13	W 103 39 10.05	191.72	48.72
	6225.00	1.06	235.90	6224.05	49.50	-49.58	-12.67	0.05	450914.66	751750.37	N 32 14 16.11	W 103 39 10.08	194.34	51.17
	6320.00	1.08	243.02	6319.03	50.38	-50.47	-14.18	0.14	450913.77	751748.88	N 32 14 16.10	W 103 39 10.10	195.69	52.42
	6414.00	1.11	242.88	6413.01	51.18	-51.28	-15.77	0.05	450912.96	751747.27	N 32 14 16.09	W 103 39 10.12	197.09	53.65
	6509.00	0.99	242.28	6508.00	51.97	-52.08	-17.31	0.13	450912.16	751745.73	N 32 14 16.08	W 103 39 10.14	198.39	54.88
	6604.00	0.94	240.47	6602.98	52.73	-52.85	-18.72	0.06	450911.40	751744.33	N 32 14 16.08	W 103 39 10.15	199.50	56.06
	6698.00	0.97	237.45	6696.97	53.53	-53.65	-20.06	0.06	450910.59	751742.98	N 32 14 16.07	W 103 39 10.17	200.50	57.28
	6793.00	0.90	228.32	6791.96	54.45	-54.58	-21.29	0.17	450909.66	751741.75	N 32 14 16.06	W 103 39 10.18	201.31	58.59
	6887.00	0.81	234.53	6885.95	55.32	-55.46	-22.38	0.14	450908.78	751740.68	N 32 14 16.05	W 103 39 10.20	201.98	59.81
	6982.00	0.84	229.54	6980.94	56.15	-56.30	-23.48	0.08	450907.94	751739.58	N 32 14 16.04	W 103 39 10.21	202.62	60.99
	7076.00	0.84	222.43	7074.93	57.10	-57.26	-24.45	0.11	450906.99	751738.59	N 32 14 16.03	W 103 39 10.22	203.12	62.26
	7171.00	0.38	224.78	7169.92	57.84	-57.99	-25.14	0.48	450906.25	751737.90	N 32 14 16.03	W 103 39 10.23	203.44	63.21
	7265.00	0.23	220.65	7263.92	58.20	-58.36	-25.48	0.16	450905.88	751737.56	N 32 14 16.02	W 103 39 10.23	203.59	63.68
	7360.00	0.20	210.04	7358.92	58.49	-58.65	-25.69	0.05	450905.60	751737.35	N 32 14 16.02	W 103 39 10.23	203.66	64.03
	7454.00	0.20	29.24	7452.92	58.49	-58.65	-25.69	0.43	450905.60	751737.35	N 32 14 16.02	W 103 39 10.23	203.66	64.03
	7644.00	0.27	26.22	7642.92	57.80	-57.96	-25.33	0.04	450906.29	751737.71	N 32 14 16.03	W 103 39 10.23	203.61	63.25
	7739.00	0.32	0.39	7737.92	57.33	-57.49	-25.23	0.15	450906.75	751737.81	N 32 14 16.03	W 103 39 10.23	203.70	62.78
	7833.00	0.29	338.99	7831.92	56.85	-57.00	-25.32	0.12	450907.24	751737.72	N 32 14 16.04	W 103 39 10.23	203.95	62.37
	8022.00	0.53	308.97	8020.91	55.85	-56.01	-26.17	0.17	450908.23	751736.87	N 32 14 16.05	W 103 39 10.24	205.04	61.82
	8117.00	0.63	299.60	8115.91	55.31	-55.47	-26.96	0.14	450908.77	751736.08	N 32 14 16.05	W 103 39 10.25	205.92	61.68
	8211.00	0.70	291.48	8209.90	54.83	-55.01	-27.95	0.12	450909.23	751735.09	N 32 14 16.06	W 103 39 10.26	206.93	61.70
	8305.00	0.73	299.92	8303.89	54.32	-54.50	-29.00	0.12	450909.74	751734.04	N 32 14 16.06	W 103 39 10.27	208.02	61.74
	8400.00	0.83	299.04	8398.88	53.68	-53.86	-30.13	0.11	450910.38	751732.91	N 32 14 16.07	W 103 39 10.29	209.22	61.72
	8495.00	0.59	299.13	8493.88	53.10	-53.29	-31.16	0.25	450910.95	751731.89	N 32 14 16.07	W 103 39 10.30	210.31	61.73
	8589.00	0.62	296.43	8587.87	52.63	-52.83	-32.03	0.04	450911.41	751731.01	N 32 14 16.08	W 103 39 10.31	211.23	61.78
	8779.00	0.85	278.04	8777.86	51.96	-52.17	-34.35	0.17	450912.07	751728.69	N 32 14 16.08	W 103 39 10.33	213.36	62.47
	8873.00	0.97	280.26	8871.84	51.71	-51.94	-35.82	0.13	450912.31	751727.22	N 32 14 16.09	W 103 39 10.35	214.60	63.09
	8968.00	1.13	282.24	8966.83	51.36	-51.59	-37.53	0.17	450912.65	751725.51	N 32 14 16.09	W 103 39 10.37	216.03	63.80
	9062.00	1.24	284.04	9060.81	50.91	-51.15	-39.42	0.12	450913.09	751723.62	N 32 14 16.09	W 103 39 10.39	217.62	64.58
	9157.00	1.10	274.85	9155.79	50.57	-50.82	-41.33	0.25	450913.42	751721.71	N 32 14 16.10	W 103 39 10.42	219.12	65.51
	9251.00	1.06	259.89	9249.77	50.63	-50.90	-43.08	0.30	450913.34	751719.96	N 32 14 16.10	W 103 39 10.44	220.25	66.69
	9346.00	1.15	237.23	9344.75	51.29	-51.57	-44.75	0.47	450912.67	751718.29	N 32 14 16.09	W 103 39 10.46	220.95	68.28
	9440.00	1.49	213.40	9438.73	52.81	-53.10	-46.22	0.68	450911.14	751716.83	N 32 14 16.08	W 103 39 10.47	221.03	70.40
	9535.00	2.20	200.83	9533.68	55.54	-55.84	-47.54	0.88	450908.41	751715.50	N 32 14 16.05	W 103 39 10.49	220.41	73.34

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')	Closure Azimuth (°)	Closure (ft)
	9629.00	1.84	194.03	9627.62	58.69	-58.99	-48.55	0.46	450905.26	751714.49	N 32 14 16.02	W 103 39 10.50	219.46	76.40
	9724.00	0.56	212.59	9722.60	60.55	-60.86	-49.17	1.39	450903.38	751713.87	N 32 14 16.00	W 103 39 10.51	218.94	78.24
	9913.00	0.62	48.49	9911.60	60.65	-60.96	-48.90	0.62	450903.28	751714.14	N 32 14 16.00	W 103 39 10.50	218.74	78.15
	10008.00	0.40	53.38	10006.59	60.12	-60.42	-48.25	0.24	450903.82	751714.79	N 32 14 16.00	W 103 39 10.50	218.61	77.32
	10102.00	0.41	46.24	10100.59	59.70	-59.99	-47.75	0.05	450904.25	751715.30	N 32 14 16.01	W 103 39 10.49	218.52	76.67
	10198.00	0.39	60.84	10196.59	59.30	-59.60	-47.21	0.11	450904.65	751715.83	N 32 14 16.01	W 103 39 10.49	218.39	76.03
	10292.00	0.53	66.66	10290.58	58.98	-59.27	-46.53	0.16	450904.98	751716.51	N 32 14 16.01	W 103 39 10.48	218.14	75.35
	10387.00	0.27	42.82	10385.58	58.64	-58.93	-45.98	0.32	450905.31	751717.06	N 32 14 16.02	W 103 39 10.47	217.96	74.74
	10576.00	0.68	32.51	10574.58	57.40	-57.68	-45.09	0.21	450906.56	751717.95	N 32 14 16.03	W 103 39 10.46	218.01	73.22
	10765.00	0.42	35.83	10763.57	55.93	-56.20	-44.10	0.13	450908.04	751718.94	N 32 14 16.04	W 103 39 10.45	218.12	71.44
	10954.00	0.62	260.12	10952.56	55.54	-55.82	-44.70	0.51	450908.42	751718.34	N 32 14 16.05	W 103 39 10.46	218.69	71.51
	11143.00	0.67	216.31	11141.55	56.60	-56.88	-46.36	0.26	450907.36	751716.68	N 32 14 16.04	W 103 39 10.47	219.18	73.39
	11238.00	0.60	218.92	11236.55	57.43	-57.72	-47.01	0.08	450908.52	751718.04	N 32 14 16.03	W 103 39 10.48	219.16	74.44
	11332.00	1.55	250.41	11330.53	58.23	-58.53	-48.51	1.15	450905.71	751714.53	N 32 14 16.02	W 103 39 10.50	219.65	76.02
	11427.00	2.25	239.30	11425.48	59.59	-59.91	-51.33	0.83	450904.33	751711.72	N 32 14 16.01	W 103 39 10.53	220.59	78.89
	11616.00	2.00	213.69	11614.35	64.20	-64.55	-58.35	0.51	450899.69	751706.70	N 32 14 15.96	W 103 39 10.59	221.12	85.68
	11710.00	1.84	209.49	11708.30	66.72	-67.09	-57.92	0.41	450897.16	751705.12	N 32 14 15.94	W 103 39 10.61	220.81	88.63
	11804.00	1.88	205.40	11802.26	69.28	-69.65	-59.24	0.29	450894.59	751703.80	N 32 14 15.91	W 103 39 10.63	220.38	91.44
	11825.00	2.00	185.88	11823.25	69.95	-70.32	-59.43	3.18	450893.92	751703.62	N 32 14 15.91	W 103 39 10.63	220.20	92.07
	11919.00	13.62	171.44	11916.22	82.58	-82.94	-57.94	12.44	450881.30	751705.10	N 32 14 15.78	W 103 39 10.61	214.94	101.18
	11951.00	18.93	170.85	11946.93	91.45	-91.80	-56.58	16.80	450872.44	751706.49	N 32 14 15.69	W 103 39 10.60	211.64	107.82
	11982.00	23.51	173.66	11975.82	102.57	-102.92	-55.07	15.13	450861.33	751707.97	N 32 14 15.58	W 103 39 10.58	208.15	116.73
	12014.00	28.38	176.61	12004.59	116.52	-116.86	-53.92	15.74	450847.38	751709.13	N 32 14 15.45	W 103 39 10.57	204.77	128.70
	12061.00	32.64	176.85	12045.07	140.35	-140.68	-52.56	9.07	450823.57	751710.48	N 32 14 15.21	W 103 39 10.55	200.49	150.18
	12108.00	37.34	176.68	12083.58	167.26	-167.58	-51.04	10.00	450796.67	751712.01	N 32 14 14.94	W 103 39 10.54	196.94	175.18
	12155.00	42.15	175.47	12119.69	197.24	-197.55	-48.96	10.37	450766.70	751714.08	N 32 14 14.65	W 103 39 10.52	193.92	203.53
	12203.00	46.86	175.49	12153.91	230.79	-231.08	-46.31	9.81	450733.17	751716.73	N 32 14 14.31	W 103 39 10.49	191.33	235.68
	12250.00	50.67	175.46	12184.89	266.03	-266.31	-43.53	8.11	450697.94	751719.52	N 32 14 13.97	W 103 39 10.46	189.28	269.84
	12297.00	55.27	177.66	12213.19	303.49	-303.75	-41.30	10.48	450660.50	751721.75	N 32 14 13.60	W 103 39 10.43	187.74	306.54
	12344.00	58.55	178.78	12238.85	342.85	-343.10	-40.08	7.26	450621.15	751722.96	N 32 14 13.21	W 103 39 10.42	186.66	345.43
	12392.00	61.10	179.36	12262.97	384.34	-384.59	-39.41	5.41	450579.67	751723.63	N 32 14 12.80	W 103 39 10.42	185.85	386.60
	12439.00	66.09	179.33	12283.87	426.42	-426.67	-38.93	10.62	450537.59	751724.11	N 32 14 12.38	W 103 39 10.42	185.21	428.44
	12451.00	67.63	179.35	12288.58	437.45	-437.70	-38.80	12.83	450526.56	751724.24	N 32 14 12.27	W 103 39 10.42	185.07	439.42
	12609.00	79.56	181.74	12333.13	588.71	-588.98	-40.34	7.69	450375.29	751722.70	N 32 14 10.77	W 103 39 10.44	183.92	590.36
	12703.00	83.45	182.95	12347.01	681.56	-681.85	-44.15	4.33	450282.42	751718.90	N 32 14 9.85	W 103 39 10.50	183.70	683.27
	12798.00	87.63	183.22	12354.40	776.08	-776.40	-49.24	4.41	450187.87	751713.80	N 32 14 8.92	W 103 39 10.56	183.63	777.96
	12893.00	90.28	182.82	12356.13	870.89	-871.24	-54.25	2.82	450093.03	751708.80	N 32 14 7.98	W 103 39 10.63	183.56	872.93
	12988.00	90.10	181.27	12355.82	965.80	-966.18	-57.64	1.64	449998.10	751705.41	N 32 14 7.04	W 103 39 10.67	183.41	967.90
	13083.00	90.03	180.89	12355.71	1060.77	-1061.16	-59.43	0.41	449903.12	751703.62	N 32 14 6.10	W 103 39 10.70	183.21	1062.83
	13178.00	89.83	179.00	12355.82	1155.77	-1156.16	-59.34	2.00	449808.13	751703.71	N 32 14 5.16	W 103 39 10.71	182.94	1157.68
	13273.00	90.69	177.88	12355.39	1250.74	-1251.12	-56.75	1.49	449713.17	751706.29	N 32 14 4.22	W 103 39 10.68	182.60	1252.41
	13368.00	90.72	178.19	12354.22	1345.70	-1346.08	-53.49	0.33	449618.24	751709.55	N 32 14 3.28	W 103 39 10.65	182.28	1347.12
	13462.00	90.38	177.20	12353.32	1439.64	-1439.98	-49.71	1.11	449524.33	751713.33	N 32 14 2.35	W 103 39 10.62	181.98	1440.83
	13557.00	88.97	178.06	12353.86	1534.58	-1534.89	-45.78	1.74	449429.42	751717.26	N 32 14 1.41	W 103 39 10.58	181.71	1535.57
	13652.00	89.28	176.87	12355.31	1629.49	-1629.78	-41.58	1.29	449334.53	751721.46	N 32 14 0.47	W 103 39 10.54	181.46	1630.31
	13747.00	86.32	173.70	12358.96	1724.13	-1724.37	-33.78	4.56	449239.94	751729.26	N 32 13 59.54	W 103 39 10.45	181.12	1724.70
	13842.00	91.10	178.01	12361.10	1818.85	-1819.05	-26.93	8.77	449145.27	751736.12	N 32 13 58.60	W 103 39 10.38	180.85	1819.25
	13937.00	89.17	175.18	12360.87	1913.70	-1913.87	-21.28	3.61	449050.46	751741.76	N 32 13 57.66	W 103 39 10.32	180.64	1913.98
	14032.00	89.83	176.93	12361.70	2008.50	-2008.63	-14.75	1.97	448955.69	751748.29	N 32 13 56.72	W 103 39 10.25	180.42	2008.69
	14127.00	90.89	180.67	12361.11	2103.47	-2103.59	-12.76	4.09	448860.74	751750.28	N 32 13 55.78	W 103 39 10.23	180.35	2103.63
	14221.00	92.06	182.32	12358.69	2197.39	-2197.52	-15.21	2.15	448766.81	751747.83	N 32 13 54.85	W 103 39 10.27	180.40	2197.58
	14316.00	91.17	181.59	12356.01	2292.27	-2292.43	-18.45	1.21	448671.91	751744.59	N 32 13 53.92	W 103 39 10.31	180.46	2292.50
	14411.00	93.30	180.76	12352.30	2387.16	-2387.33	-20.40	2.41	448577.01	751742.64	N 32 13 52.98	W 103 39 10.34	180.49	2387.42
	14506.00	91.48	178.48	12348.34	2482.07	-2482.24	-19.77	3.07	448482.11	751743.28	N 32 13 52.04	W 103 39 10.34	180.46	2482.31
	14600.00	91.79	179.96	12345.66	2578.02	-2578.19	-18.49	1.61	448388.16	751744.55	N 32 13 51.11	W 103 39 10.34	180.41	2576.25
	14695.00	91.65	179.48	12342.81	2670.98	-2671.14	-18.02	0.53	448293.21	751745.02	N 32 13 50.17	W 103 39 10.34	180.39	2671.20
	14790.00	90.34	179.97	12341.16	2765.96	-2766.12	-17.57	1.47	448198.23	751745.47	N 32 13 49.23	W 103 39 10.34	180.36	2766.18
	14885.00	89.78	180.59	12341.08	2860.95	-2861.12	-18.03	0.89	448103.24	751745.01	N 32 13 48.29	W 103 39 10.35	180.36	2861.18
	14980.00	89.11	181.04	12342.01	2955.93	-2956.11	-19.38	0.83	448008.26	751743.66	N 32 13 47.35	W 103 39 10.37	180.38	2956.17
	15075.00	90.07	183.16	12342.69	3050.83	-3051.03	-22.88	2.45	447913.33	751740.18	N 32 13 46.41	W 103 39 10.42	180.43	3051.12
	15169.00	89.66	183.51	12342.91	3144.64	-3144.87	-28.33	0.57	447819.50	751734.71	N 32 13 45.48	W 103 39 10.49	180.52	3145.00
	15265.00	90.45	181.45	12342.82	3240.51	-3240.78	-32.49	2.30	447723.60	751730.56	N 32 13 44.53	W 103 39 10.55	180.57	3240.94

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 ° ' '')	Closure Azimuth (°)	Closure (ft)
	15360.00	91.10	178.60	12341.54	3335.49	-3335.76	-32.53	3.08	447628.62	751730.51	N 32 13 43.59	W 103 39 10.56	180.58	3335.92
	15455.00	90.10	177.51	12340.54	3430.45	-3430.70	-29.30	1.56	447533.69	751733.74	N 32 13 42.65	W 103 39 10.53	180.49	3430.82
	15550.00	89.07	178.73	12341.23	3525.35	-3525.57	-24.53	1.38	447438.82	751738.51	N 32 13 41.71	W 103 39 10.48	180.40	3525.66
	15645.00	89.14	178.34	12342.71	3620.27	-3620.47	-20.44	1.70	447343.92	751742.60	N 32 13 40.78	W 103 39 10.44	180.32	3620.53
	15740.00	88.63	177.40	12344.56	3715.21	-3715.38	-16.91	1.13	447249.01	751746.13	N 32 13 39.84	W 103 39 10.40	180.26	3715.42
	15835.00	90.55	177.42	12345.24	3810.13	-3810.28	-12.62	2.02	447154.12	751750.42	N 32 13 38.90	W 103 39 10.38	180.19	3810.30
	15930.00	89.93	177.67	12344.85	3905.06	-3905.19	-8.55	0.70	447059.21	751754.49	N 32 13 37.96	W 103 39 10.32	180.13	3905.20
	16024.00	89.31	179.67	12345.47	3999.04	-3999.16	-6.37	2.23	446965.25	751758.67	N 32 13 37.03	W 103 39 10.30	180.09	3999.16
	16119.00	90.34	180.20	12345.76	4094.04	-4094.16	-6.26	1.22	446870.26	751756.78	N 32 13 36.09	W 103 39 10.31	180.09	4094.16
	16214.00	90.38	180.51	12345.16	4189.03	-4189.15	-6.85	0.33	446775.26	751756.19	N 32 13 35.15	W 103 39 10.32	180.09	4189.16
	16309.00	89.90	181.59	12344.93	4284.00	-4284.14	-8.59	1.24	446680.29	751754.45	N 32 13 34.21	W 103 39 10.35	180.11	4284.14
	16404.00	90.76	180.80	12344.38	4378.96	-4379.11	-10.57	1.23	446585.31	751752.47	N 32 13 33.27	W 103 39 10.38	180.14	4379.12
	16499.00	90.38	180.54	12343.44	4473.94	-4474.10	-11.68	0.48	446490.33	751751.36	N 32 13 32.33	W 103 39 10.40	180.15	4474.12
	16594.00	89.76	180.63	12343.32	4568.93	-4569.09	-12.85	0.68	446395.34	751750.39	N 32 13 31.39	W 103 39 10.42	180.16	4569.11
	16689.00	90.34	181.96	12343.24	4663.89	-4664.07	-14.80	1.53	446300.37	751748.24	N 32 13 30.45	W 103 39 10.45	180.18	4664.09
	16783.00	91.07	182.06	12342.08	4757.80	-4758.00	-18.10	0.78	446206.44	751744.94	N 32 13 29.52	W 103 39 10.49	180.22	4758.04
Section Line Crossing [321' FWL]	16787.00	91.06	182.00	12342.01	4761.79	-4762.00	-18.24	1.53	446202.44	751744.80	N 32 13 29.48	W 103 39 10.49	180.22	-4762.03
	16879.00	90.72	180.63	12340.58	4853.74	-4853.96	-20.35	1.53	446110.48	751742.69	N 32 13 28.57	W 103 39 10.53	180.24	4854.00
	16974.00	90.52	178.71	12339.55	4948.73	-4948.95	-19.80	2.03	446015.50	751743.24	N 32 13 27.63	W 103 39 10.53	180.23	4948.99
	17068.00	90.38	179.49	12338.82	5042.72	-5042.93	-18.33	0.84	445921.52	751744.71	N 32 13 26.70	W 103 39 10.52	180.21	5042.97
	17164.00	90.24	179.92	12338.30	5138.72	-5138.93	-17.83	0.47	445825.53	751745.21	N 32 13 25.75	W 103 39 10.52	180.20	5138.96
	17258.00	90.58	179.56	12337.62	5232.72	-5232.93	-17.41	0.53	445731.53	751745.63	N 32 13 24.82	W 103 39 10.52	180.19	5232.96
	17353.00	90.24	180.08	12336.94	5327.72	-5327.92	-17.11	0.65	445636.54	751745.93	N 32 13 23.88	W 103 39 10.52	180.18	5327.95
	17448.00	90.69	179.37	12336.17	5422.71	-5422.92	-16.65	0.88	445541.55	751746.39	N 32 13 22.94	W 103 39 10.52	180.18	5422.95
	17543.00	90.24	177.62	12335.40	5517.69	-5517.88	-14.16	1.90	445446.59	751748.88	N 32 13 22.00	W 103 39 10.50	180.15	5517.90
	17638.00	90.65	178.19	12334.66	5612.64	-5612.81	-10.68	0.74	445351.66	751752.36	N 32 13 21.06	W 103 39 10.47	180.11	5612.82
	17733.00	89.55	178.14	12334.50	5707.61	-5707.76	-7.64	1.16	445256.72	751755.40	N 32 13 20.12	W 103 39 10.44	180.08	5707.77
	17829.00	90.45	178.54	12334.50	5803.58	-5803.72	-4.88	1.03	445160.76	751758.18	N 32 13 19.17	W 103 39 10.42	180.05	5803.72
	17923.00	89.90	177.68	12334.21	5897.54	-5897.67	-1.76	1.09	445066.82	751761.28	N 32 13 18.24	W 103 39 10.39	180.02	5897.67
	18018.00	89.38	177.37	12334.81	5992.48	-5992.58	2.34	0.64	444971.92	751765.38	N 32 13 17.30	W 103 39 10.35	179.98	5992.58
	18113.00	88.80	178.39	12336.32	6087.42	-6087.50	5.85	1.24	444877.00	751768.89	N 32 13 16.36	W 103 39 10.31	179.94	6087.50
	18208.00	89.17	179.88	12338.00	6182.40	-6182.47	7.29	1.62	444782.03	751770.33	N 32 13 15.42	W 103 39 10.30	179.93	6182.47
	18303.00	88.07	179.35	12340.29	6277.37	-6277.44	7.93	1.29	444687.07	751770.97	N 32 13 14.48	W 103 39 10.30	179.93	6277.44
	18398.00	88.04	180.88	12343.51	6372.31	-6372.38	7.74	1.61	444592.13	751770.78	N 32 13 13.54	W 103 39 10.31	179.93	6372.39
	18493.00	89.69	181.57	12345.39	6467.25	-6467.34	5.71	1.88	444497.18	751768.74	N 32 13 12.60	W 103 39 10.34	179.95	6467.34
	18588.00	90.48	180.76	12345.25	6562.21	-6562.32	3.77	1.19	444402.20	751766.81	N 32 13 11.66	W 103 39 10.37	179.97	6562.32
	18683.00	90.31	181.11	12344.60	6657.19	-6657.30	2.22	0.41	444307.22	751765.26	N 32 13 10.72	W 103 39 10.40	179.98	6657.30
	18778.00	90.83	181.10	12343.65	6752.15	-6752.28	0.39	0.55	444212.25	751763.43	N 32 13 9.78	W 103 39 10.42	180.00	6752.28
	18873.00	91.10	180.19	12342.05	6847.12	-6847.26	-0.68	1.00	444117.27	751762.36	N 32 13 8.84	W 103 39 10.44	180.01	6847.26
	18968.00	89.88	179.09	12341.26	6942.11	-6942.25	-0.08	1.74	444022.28	751762.96	N 32 13 7.91	W 103 39 10.44	180.00	6942.25
	19063.00	89.17	178.87	12342.06	7037.10	-7037.23	1.61	0.76	443927.31	751764.85	N 32 13 6.97	W 103 39 10.43	179.99	7037.23
	19158.00	90.21	179.07	12342.58	7132.09	-7132.21	3.32	1.11	443832.33	751766.36	N 32 13 6.03	W 103 39 10.42	179.97	7132.21
	19253.00	89.93	178.17	12342.46	7227.08	-7227.18	5.61	0.99	443737.36	751768.65	N 32 13 5.09	W 103 39 10.40	179.96	7227.18
	19343.00	89.42	177.46	12342.97	7317.03	-7317.11	9.04	0.97	443647.43	751772.08	N 32 13 4.20	W 103 39 10.37	179.93	7317.12
	19438.00	89.24	179.68	12344.08	7412.00	-7412.07	11.42	2.32	443552.48	751774.46	N 32 13 3.26	W 103 39 10.34	179.91	7412.08
	19533.00	88.90	179.34	12345.62	7506.99	-7507.06	12.25	0.49	443457.50	751775.29	N 32 13 2.32	W 103 39 10.34	179.91	7507.07
	19627.00	89.11	179.27	12347.26	7600.97	-7601.03	13.39	0.24	443363.53	751776.43	N 32 13 1.39	W 103 39 10.34	179.90	7601.05
	19722.00	89.07	179.63	12348.76	7695.96	-7696.02	14.30	0.38	443268.55	751777.34	N 32 13 0.45	W 103 39 10.33	179.89	7696.03
	19817.00	89.35	180.76	12350.07	7790.94	-7791.01	13.98	1.23	443173.56	751777.02	N 32 12 59.51	W 103 39 10.34	179.90	7791.02
	19912.00	89.35	181.08	12351.15	7885.91	-7885.99	12.46	0.34	443078.58	751775.50	N 32 12 58.57	W 103 39 10.37	179.91	7886.00
	20007.00	89.69	181.23	12351.95	7980.88	-7980.97	10.54	0.39	442983.61	751773.58	N 32 12 57.63	W 103 39 10.40	179.92	7980.97
	20102.00	89.93	181.66	12352.26	8075.83	-8075.93	8.15	0.52	442888.65	751771.19	N 32 12 56.69	W 103 39 10.43	179.94	8075.94
	20197.00	89.35	179.49	12352.86	8170.81	-8170.92	7.19	2.36	442793.68	751770.23	N 32 12 55.75	W 103 39 10.45	179.95	8170.93
	20292.00	89.04	180.00	12354.19	8265.80	-8265.91	7.62	0.83	442698.68	751770.65	N 32 12 54.81	W 103 39 10.45	179.95	8265.91
	20387.00	89.48	179.28	12355.42	8360.79	-8360.90	8.21	0.89	442603.69	751771.25	N 32 12 53.87	W 103 39 10.45	179.94	8360.90
	20482.00	89.59	178.72	12356.19	8455.78	-8455.88	9.87	0.60	442508.71	751772.91	N 32 12 52.93	W 103 39 10.44	179.93	8455.89
	20577.00	89.55	179.23	12356.91	8550.77	-8550.86	11.57	0.54	442413.74	751774.61	N 32 12 51.99	W 103 39 10.43	179.92	8550.87
	20672.00	89.52	178.89	12357.68	8645.76	-8645.85	13.13	0.36	442318.76	751776.17	N 32 12 51.05	W 103 39 10.42	179.91	8645.86
	20767.00	89.42	178.89	12358.55	8740.75	-8740.83	14.97	0.11	442223.78	751778.01	N 32 12 50.11	W 103 39 10.40	179.90	8740.84
	20862.00	89.62	179.34	12359.35	8835.74	-8835.81	16.44	0.52	442128.80	751779.47	N 32 12 49.17	W 103 39 10.39	179.89	8835.83

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 ° ' '')	Closure Azimuth (°)	Closure (ft)
	20957.00	89.24	179.05	12360.30	8930.74	-8930.80	17.77	0.50	442033.82	751780.81	N 32 12 48.23	W 103 39 10.38	179.89	8930.81
	21052.00	89.69	180.19	12361.18	9025.73	-9025.79	18.40	1.29	441938.83	751781.44	N 32 12 47.29	W 103 39 10.38	179.88	9025.81
	21146.00	89.83	178.61	12361.58	9119.73	-9119.78	19.38	1.69	441844.84	751782.42	N 32 12 46.36	W 103 39 10.38	179.88	9119.80
	21241.00	89.42	180.29	12362.20	9214.72	-9214.77	20.30	1.82	441749.86	751783.34	N 32 12 45.42	W 103 39 10.37	179.87	9214.79
	21336.00	89.79	179.01	12362.85	9309.71	-9309.76	20.88	1.40	441654.87	751783.92	N 32 12 44.48	W 103 39 10.37	179.87	9309.79
	21431.00	89.59	179.94	12363.37	9404.71	-9404.76	21.75	1.00	441559.88	751784.79	N 32 12 43.54	W 103 39 10.37	179.87	9404.78
	21526.00	89.42	181.63	12364.19	9499.69	-9499.74	20.45	1.79	441464.90	751783.48	N 32 12 42.60	W 103 39 10.39	179.88	9499.76
	21621.00	89.55	181.51	12365.04	9594.63	-9594.70	17.84	0.19	441369.94	751780.88	N 32 12 41.66	W 103 39 10.43	179.89	9594.72
	21716.00	89.76	180.88	12365.81	9689.59	-9689.68	15.86	0.70	441274.97	751778.90	N 32 12 40.72	W 103 39 10.46	179.91	9689.69
	21811.00	89.66	179.53	12366.10	9784.58	-9784.68	15.52	1.42	441179.98	751778.56	N 32 12 39.78	W 103 39 10.47	179.91	9784.69
	21906.00	89.21	179.14	12367.03	9879.58	-9879.66	16.62	0.63	441084.99	751779.66	N 32 12 38.84	W 103 39 10.47	179.90	9879.68
Last Survey	21924.00	89.69	179.38	12367.20	9897.58	-9897.66	16.86	2.98	441067.00	751779.90	N 32 12 38.66	W 103 39 10.46	179.90	9897.68
TD, PTB [101' FSL, 328' FWL]	21967.00	89.65	179.00	12367.45	9940.57	-9940.66	17.46	0.89	441024.00	751780.50	N 32 12 38.23	W 103 39 10.46	179.90	9940.67

Survey Type: Def Survey

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)	Survey Tool Type	Borehole / Survey
	1	0.000	26.000	1/98.425	14.750	10.750	NAL_MWD_IFR1+MS-Depth Only	ST01 / Final Surveys - Cimarex Dos Equis 11-14 Federal Com 4H ST01 MWD 0ft-21967
	1	26.000	26.000	Act Stns	14.750	10.750	NAL_MWD_IFR1+MS-Depth Only	ST01 / Final Surveys - Cimarex Dos Equis 11-14 Federal Com 4H ST01 MWD 0ft-21967
	1	26.000	1224.000	Act Stns	14.750	10.750	NAL_MWD_IFR1+MS	ST01 / Final Surveys - Cimarex Dos Equis 11-14 Federal Com 4H ST01
	1	1224.000	11847.000	Act Stns	9.875	7.625	NAL_MWD_IFR1+MS	ST01 / Final Surveys - Cimarex Dos Equis 11-14 Federal Com 4H ST01
	1	11847.000	13118.000	Act Stns	8.750	7.000	NAL_MWD_IFR1+MS	ST01 / Final Surveys - Cimarex Dos Equis 11-14 Federal Com 4H ST01
	1	13118.000	21967.000	Act Stns	6.000	4.500	NAL_MWD_IFR1+MS	ST01 / Final Surveys - Cimarex Dos Equis 11-14 Federal Com 4H ST01

Borehole: ST01			Well: Cimarex Dos Equis 11-14 Federal Com 4H			Field: NM Lea County (NAD 83)			Structure: Cimarex Dos Equis 11-14 Federal Com 4H		
Gravity & Magnetic Parameters											
Model: HDGM 2019		Dip: 69.92°	Date: 21-Feb-2019	Surface Location: NAD83 New Mexico State Plane, Eastern Zone, US Feet				Grid Conv: 0.3631°	Notes: Cimarex Dos Equis 11-14 Federal Com 4H		
MagDec: 6.72°		FR: 47968.34mT	Gravity FR: 986.624mgals (8.00655 gals)	Lat: N 32 14 16.69	Northings: 450964.26NUS	Scale Fact: 0.999998	Plan: Cimarex Dos Equis 11-14 Federal Com 4H	TVD Ref: RKB(2657.21 above NSL)	Final Survey: Cimarex Dos Equis 11-14 Federal Com 4H ST01 MWD 09-21967		
				Long: W 102 38 8.93	Eastings: 751763.64EUS						

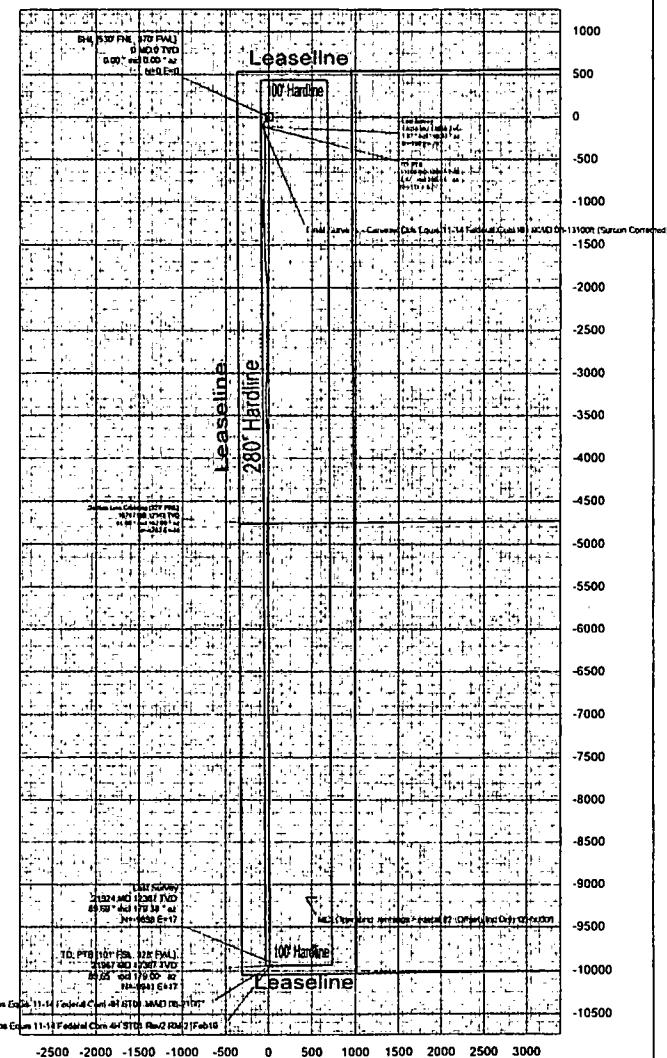
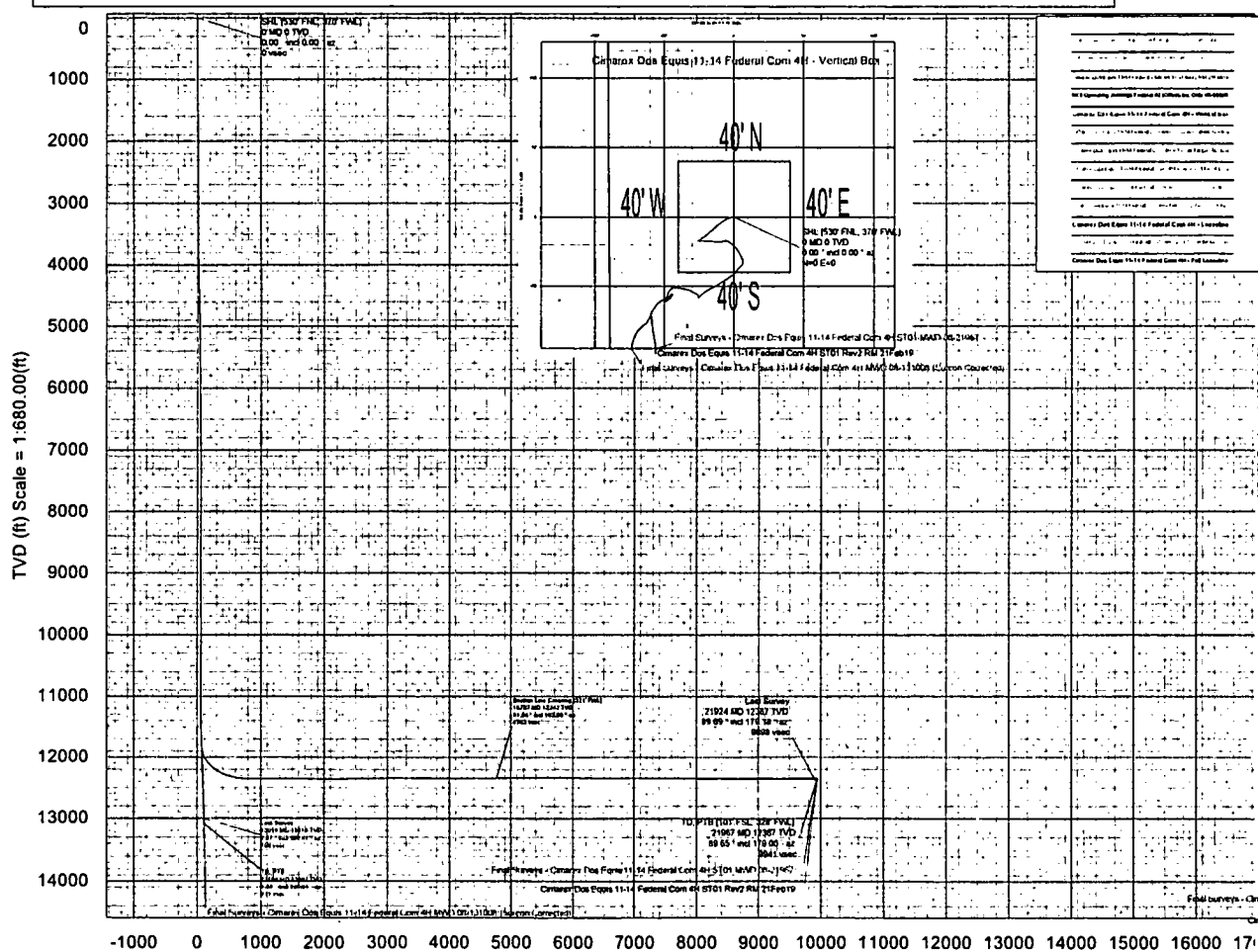
Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL (530° FNL, 370° FNL)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Section Line Crossing (321° FNL)	16787.00	91.06	182.00	12342.01	4761.78	-4762.00	-18.24	1.53
Last Survey	21924.00	89.69	179.38	12367.20	9897.58	-8897.66	16.86	2.98
TD, PTB (101° FNL, 328° FNL)	21967.00	89.85	179.00	12367.45	9940.57	-8940.66	17.46	0.89



Grid
True
Mag

Grid North
Tot Corr (M→G 6.385°)
Mag Dec (6.728°)
Grid Conv (0.363°)

CONTROLLED	
Drawn by	Checked by
Copy number	of 1
Date	08-04-2019
1. Exam	
2. Check	
3. Issue	
4. Release	
5. Close	



Vertical Section (ft) Azim = 179.65° Scale = 1:680.00(ft) Origin = 0N/-S, 0E/-W

EW (ft) Scale = 1:496.94 (ft)



Cimarex Energy Co.

600 N. Marienfeld St. ♦ Suite 600 ♦ Midland, TX 79701 ♦ (432) 620-1938 ♦ Fax (432) 620-1940

A subsidiary of Cimarex Energy Co. • A NYSE Listed Company • "XEC"

August 30, 2019

State of New Mexico
Oil Conservation Division – District 1
1625 N. French Drive
Hobbs, NM 88240

Re: Request for Exception to Rule 107J
Tubingless Completion
Dos Equis 11-14 Federal Com 4H – 30-025-45413
Lea County, NM

Dear Sir:

Cimarex Energy Co. respectfully requests an exception to NMOCD Rule 107J, well tubing requirements. Cimarex request a tubingless completions for our Dos Equis 11-14 Federal Com 4H well to allow for greater flowback after frac stimulation.

Cimarex plans to install production tubing as soon as flow decreases, which should occur within 6 months.

Thank you for your consideration of this request. Please feel free to contact me if you need additional information.

Sincerely,

A handwritten signature in dark ink, appearing to be "Fatima Vasquez", with a long, sweeping horizontal line extending to the right.

Fatima Vasquez
Regulatory Analyst
432-620-1933

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Cimarex Energy Co. 600 N. Marienfeld, Suite 600 Midland, Texas 79701		² OGRID Number 215099
		³ Reason for Filing Code/ Effective Date NW / 07/12/2019
⁴ API Number 30 - 025-45413	⁵ Pool Name WC-025 G-08 S243213C; Wolfcamp	⁶ Pool Code 98309
⁷ Property Code 322999	⁸ Property Name Dos Equis 11-14 Federal Com	⁹ Well Number 004H

II. 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
D	11	24S	32E		530	North	370	West	Lea

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	14	24S	32E		101	South	328	West	Lea
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 07/12/201999	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
21778	Sunoco R&M P.O. Box 2039 Tulsa, OK 74102	O
703107	Lucid Energy Delaware, LLC 3100 McKinnon St., Suite 800 Dallas, TX 75201	G

IV. Well Completion Data

²¹ Spud Date 01/22/2019	²² Ready Date 07/12/2019	²³ TD 21,967'	²⁴ PBDT 21,895'	²⁵ Perforations 12,703'-21,868'	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
14 3/4"	10 3/4"	1224'	1030 sx - TOC 0		
9 7/8" 8 3/4"	7 5/8"	12,508'	1320 sx - TOC 0		
6 3/4"	5 1/2" 5"	11,696' 21,967'	1255 sx - TOC @ 10,900'		

V. Well Test Data

³¹ Date New Oil 07/12/2019	³² Gas Delivery Date 07/12/2019	³³ Test Date 07/17/2019	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure	³⁶ Csg. Pressure 4171
³⁷ Choke Size 22	³⁸ Oil 1064	³⁹ Water 2443	⁴⁰ Gas 3038		⁴¹ Test Method F

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:

Fatima Vasquez

Title:

Regulatory Analyst

E-mail Address:

fvasquez@cimarex.com

Date:

08/30/2019

Phone:

432-620-1933

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date: