State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Secretary

Adrienne Sandoval, Division Director
Oil Conservation Division

08/05/2020

Operator Notice Regarding

C-104 Denial and Request for Information

30-015-45118 HH SO 8 5 FED 003 #004H

OCD is providing notice to operators that it will deny your C-104 – *Request for Allowable and Authorization to Transport* if it fails to provide complete and accurate information, including:

Test Allowable, New Well and Recompleted Well

Please review/amend attachment(s):
Mark C-14 NW, 'AMENDED REPORT'

Amend/Verify highlighted areas on all forms attached. C-104 NW has PBTD/missing on 3160-4 and Completion Sundry notice in well files. Amend

- ☐ C-103 (or BLM equivalent) for all casing strings
  - ☐ Spud Notice
  - ☐ Surface Casing
  - ☐ Intermediate Casing (if applicable)
  - ☐ Additional Intermediate Casing (if applicable)
  - ☐ Production Casing or Liner
- ☐ Applicable Order (NSL, NSP, Other _____)
- ☐ Deviation Survey for Vertical Wells
- ☐ Directional Survey
- XX C-102 (As-Drilled Plat for Horizontal Well) *Amend highlighted areas.*

New Well and Recompleted Well Only

- XX C-103 Completion Sundry (or BLM equivalent) *PBTD missing on Sundry notice in well files, provide a 'Record Clean-up' 3160-5 for approval by BLM to justify depth written on C-104 NW. Missing ready date on sundry.*
- XX C-105 Completion Report (or BLM equivalent) *Missing BLM REVISED approval copy, update highlighted fields. PBTD on #19 missing. Casing depths are conflicting depths to approved sundry notices in well files online & C-104. Amend all highlighted areas.*
- ☐ All Logs Run on Well

The sale or transport of product without an approved C-104 violates the Oil and Gas Act and the implementing rules, including 19.15.7.15 and 19.15.16.19 NMAC. OCD determines that your C-104 is incomplete or inaccurate. Failure to comply with this notice may result in enforcement action.

If you have any questions, please contact the local OCD District Office.

Once Complete, re-submit through e docs asap. Thank you.

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

Rec'd 05/04/2020 - NMOCD

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: CHEVRON USA INC, 6301 DEAUVILLE BLVD, MIDLAND, TX 79706	[2] OGRID Number: 4323
	[3] Reason for Filing Code/ Effective Date: NW

[4] API Number	[5] Pool Name	[6] Pool Code
30 - 015-45118	PURPLE SAGE;WOLFCAMP	98220
[7] Property Code	[8] Property Name	[9] Well Number
	HH SO 8 5 FED 003	4H

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
C	17	26S	27E		554	NORTH	2309	WEST	EDDY

[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
C	5	26S	27E		182	NORTH	2007	EAST	EDDY

[12] Lse Code	[13] Producing Method Code	[14] Gas Connection Date	[15] C-129 Permit Number	[16] C-129 Effective Date	[17] C-129 Expiration Date
F	F	11/27/2019			

III. Oil and Gas Transporters

[18] Transporter OGRID	[19] Transporter Name and Address	[20] O/G/W
34053	PLAINS 500 Dallas, Ste 700 Houston, TX	O
151618	ENTERPRISE PO BOX 4503 Houston, TX	G

IV. Well Completion Data

[21] Spud Date	[22] Ready Date	[23] TD	[24] PBTD	[25] Perforations	[26] DHC, MC
09/21/2018	11/27/2019	20331'	20316'	10200' - 20171'	

[27] Hole Size	[28] Casing & Tubing Size	[29] Depth Set	[30] Sacks Cement
SURF 17.5"	13.375"	478'	461
INT 12.250"	9.625"	8340'	1740
PROD 8.5"	5.5"	20316'	3421
TBG	2.875"	9287'	

V. Well Test Data

[31] Date New Oil	[32] Gas Delivery Date	[33] Test Date	[34] Test Length	[35] Tbg. Pressure	[36] Csg. Pressure
11/27/2019	11/27/2019	12/16/2019	24 HR	1151	7
[37] Choke Size	**[38] Oil**	**[39] Water**	**[40] Gas**		**[41] Test Method**
64	424	3647	3647		

[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: Kayla McConnell

Printed name: KAYLA MCCONNELL

Title: PERMITTING SPECIALIST

E-mail Address: GNCV@CHEVRON.COM

Date: 2/25/2020

Phone: 432-687-7375

OIL CONSERVATION DIVISION

Approved by: DENIED

Title:

Approval Date:

refer to page 1 of the attachments

NMOCD-OCD ARTESIA
REC'D: 5/04/2020

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

[X] AMENDED REPORT
As-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	98220	PURPLE SAGE; WOLFCAMP (GAS)

[4] Property Code	[5] Property Name	[6] Well Number
	HH SO 8 5 FED 003	4H

[7] OGRID No.	[8] Operator Name	[9] Elevation
4323	CHEVRON U.S.A. INC.	3265'

[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
C	17	26 SOUTH	27 EAST, N.M.P.M.		554'	NORTH	2309'	WEST	EDDY

[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
B	5	26 SOUTH	27 EAST, N.M.P.M.		182'	NORTH	2007'	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640			

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.

[16]

FINAL LAST TAKE POINT		
X=	538,245'	NAD 27
Y=	392,106'	
LAT.	32.077954° N	
LONG.	104.209855° W	
X=	579,429'	NAD83/86
Y=	392,163'	
LAT.	32.078075° N	
LONG.	104.210349° W	

MID POINT		
X=	538,202'	NAD 27
Y=	387,130'	
LAT.	32.064276° N	
LONG.	104.210014° W	
X=	579,385'	NAD83/86
Y=	387,187'	
LAT.	32.064397° N	
LONG.	104.210508° W	

FINAL FIRST TAKE POINT		
X=	538,119'	NAD 27
Y=	382,134'	
LAT.	32.050542° N	
LONG.	104.210300° W	
X=	579,302'	NAD83/86
Y=	382,191'	
LAT.	32.050664° N	
LONG.	104.210794° W	

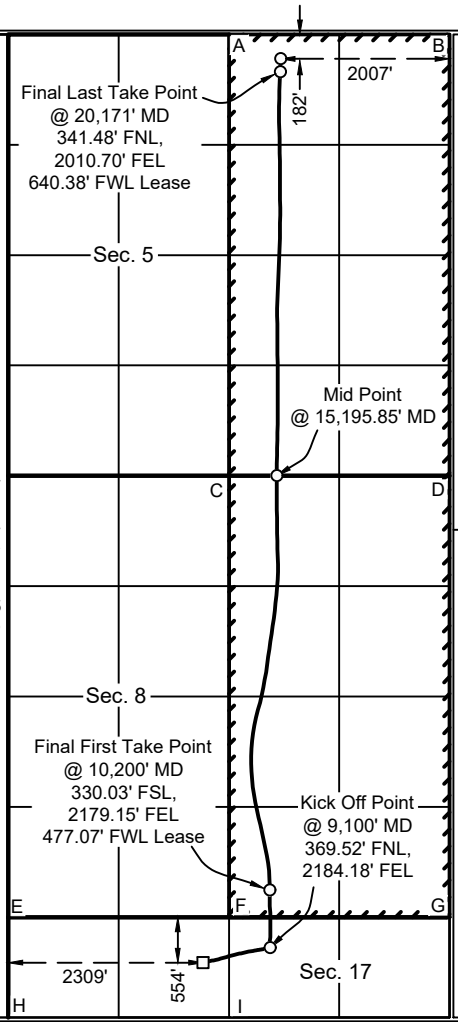
KICK OFF POINT		
X=	538,123'	NAD 27
Y=	381,435'	
LAT.	32.048619° N	
LONG.	104.210289° W	
X=	579,307'	NAD83/86
Y=	381,491'	
LAT.	32.048741° N	
LONG.	104.210782° W	

ACTUAL BOTTOM HOLE LOCATION		
X=	538,250'	NAD 27
Y=	392,266'	
LAT.	32.078393° N	
LONG.	104.209840° W	
X=	579,433'	NAD83/86
Y=	392,323'	
LAT.	32.078515° N	
LONG.	104.210334° W	

CORNER COORDINATES TABLE (NAD 27)

A - Y=392446.14, X=537606.87
B - Y=392449.96, X=540258.92
C - Y=387132.57, X=537574.14
D - Y=387122.04, X=540212.94
E - Y=381810.94, X=534988.20
F - Y=381805.09, X=537646.07
G - Y=381799.23, X=540303.95
H - Y=376480.27, X=535066.16
I - Y=376477.58, X=537710.13

HH SO 8 5 FED 003 4H WELL		
X=	537,306'	NAD 27
Y=	381,252'	
LAT.	32.048119° N	
LONG.	104.212927° W	
X=	578,490'	NAD83/86
Y=	381,309'	
LAT.	32.048241° N	
LONG.	104.213421° W	
ELEVATION +3265' NAVD 88		



[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.

Kayla McConnell 2/25/2020
Signature Date

Kayla McConnell
Printed Name

kaylamcconnell@chevron.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.

04/07/2017
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT L. LASTRAPES
NEW MEXICO
23006
PROFESSIONAL SURVEYOR

12/13/2019
Certificate Number

Intent [ ] As Drilled [x]

API #
30-015-45118

Operator Name:	Property Name:	Well Number
CHEVRON USA INC	HH SO 10 15 FED 002	4H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	17	26S	27E		269	N	2184	E	EDDY

Latitude	Longitude	NAD
32.048741	-104.210782	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
O	8	26S	27E		330	S	2179	E	EDDY

Latitude	Longitude	NAD
32.050664	-104.210794	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	5	26S	27E		341	N	2010	E	EDDY

Latitude	Longitude	NAD
32.078075	-104.210349	83

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

Is this well an infill well? NO

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

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

May 21, 2019

Chevron USA Inc.
9525 CAMINO MEDIA #1392
BAKERSFIELD, CA

Re:

CLIENT: Chevron USA Inc.
WELL: HH SO 8 5 FED 003 4H
FIELD: PURPLE SAGE (WOLFCAMP)

17, 26S, 27E, EDDY NM
32.04824 104.21343

RIG: PATTERSON 815
COUNTY: EDDY
API NO: 30-015-45118-0000
JOB NO: 18MLD3956

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900).
Other information required by your office is as follows.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
KHALID ISSA FS	HH SO 8 5 FED 003 4H Original Hole	506.00 Ft 20289.00 Ft	to	December 1, 2018 May 15, 2019	to	TelePacer

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Field Service Manager

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

Well Reference:
17, 26S, 27E, EDDY NM
32.04824 104.21343

I, KHALID ISSA certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of December 01, 2018 through May 15, 2019, conduct or supervise the taking of the TelePacer surveys from a depth of 506.00 feet to a depth of 20289.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Chevron USA Inc. for the HH SO 8 5 FED 003 4H Well (Original Hole) API No. 30-015-45118-0000 in New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By
KHALID ISSA
FS

Subscribed and Sworn to before me this 21st day of May (month) 2019 (yr)

My Commission expires:

2-16-2022

D. Adams (signature)
Notary Public

Adams County Colorado
(County State)

DONNA ADAMS
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20184007893
MY COMMISSION EXPIRES FEBRUARY 16, 2022

Schlumberger

Chevron HH SO 8 5 FED 003 No. 4H MWD to 20331ft Survey Geodetic Report

(Def Survey)

Report Date:	May 16, 2019 - 08:41 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	Chevron	**Vertical Section Azimuth:**	359.760 ° (Grid North)
Field:	NM Eddy County (NAD 27)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Chevron HH SO 8 5 FED 003 No. 4H / Chevron HH SO 8 5 FED 003 No. 4H	**TVD Reference Datum:**	RKB = 28ft
Well:	Chevron HH SO 8 5 FED 003 No. 4H	**TVD Reference Elevation:**	3293.000 ft above MSL
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3265.000 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	7.229 °
Survey Name:	Chevron HH SO 8 5 FED 003 No. 4H MWD to 20331ft	**Total Gravity Field Strength:**	998.4291mgn (9.80665 Based)
Survey Date:	May 16, 2019	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	298.812 ° / 11750.647 ft / 6.867 / 1.211	**Total Magnetic Field Strength:**	47776.006 nT
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.658 °
Location Lat / Long:	N 32° 2' 53.23011", W 104° 12' 46.53521"	**Declination Date:**	May 16, 2019
Location Grid N/E Y/X:	N 381252.000 ftUS, E 537306.000 ftUS	**Magnetic Declination Model:**	HDGM 2019
CRS Grid Convergence Angle:	0.0639 °	**North Reference:**	Grid North
Grid Scale Factor:	0.99991068	**Grid Convergence Used:**	0.0639 °
Version / Patch:	2.10.760.0	**Total Corr Mag North->Grid North:**	7.1654 °
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	381252.00	537306.00	N 32 2 53.23	W 104 12 46.54
First 3rd Party Survey	148.00	0.60	284.41	148.00	0.20	0.19	-0.75	0.41	381252.19	537305.25	N 32 2 53.23	W 104 12 46.54
	193.00	1.10	128.14	193.00	-0.01	-0.02	-0.64	3.70	381251.98	537305.36	N 32 2 53.23	W 104 12 46.54
	282.00	0.40	97.91	281.99	-0.59	-0.59	0.34	0.88	381251.41	537306.34	N 32 2 53.22	W 104 12 46.53
	372.00	0.50	147.40	371.98	-0.96	-0.96	0.86	0.43	381251.04	537306.86	N 32 2 53.22	W 104 12 46.53
Last 3rd Party Survey	452.00	1.40	173.30	451.97	-2.23	-2.22	1.17	1.22	381249.78	537307.17	N 32 2 53.21	W 104 12 46.52
First SLB MWD Survey	506.00	0.80	211.45	505.96	-3.21	-3.20	1.05	1.70	381248.80	537307.05	N 32 2 53.20	W 104 12 46.52
	595.00	0.92	27.25	594.96	-3.10	-3.10	1.05	1.93	381248.90	537307.05	N 32 2 53.20	W 104 12 46.52
	687.00	2.35	61.84	686.92	-1.56	-1.55	3.05	1.82	381250.45	537309.05	N 32 2 53.21	W 104 12 46.50
	874.00	4.57	75.98	873.57	2.01	2.07	13.66	1.26	381254.07	537319.66	N 32 2 53.25	W 104 12 46.38
	968.00	6.67	77.11	967.12	4.10	4.19	22.62	2.24	381256.19	537328.61	N 32 2 53.27	W 104 12 46.27
	1063.00	7.93	80.50	1061.34	6.36	6.50	34.46	1.40	381258.50	537340.45	N 32 2 53.29	W 104 12 46.13
	1157.00	8.79	77.64	1154.34	8.91	9.11	47.87	1.02	381261.11	537353.86	N 32 2 53.32	W 104 12 45.98
	1252.00	10.05	75.59	1248.06	12.46	12.73	62.99	1.37	381264.73	537368.98	N 32 2 53.36	W 104 12 45.80
	1346.00	9.63	74.75	1340.68	16.51	16.84	78.52	0.47	381268.84	537384.51	N 32 2 53.40	W 104 12 45.62
	1441.00	9.69	77.22	1434.33	20.30	20.70	93.98	0.44	381272.69	537399.97	N 32 2 53.43	W 104 12 45.44
	1535.00	9.49	77.91	1527.02	23.61	24.07	109.27	0.25	381276.07	537415.26	N 32 2 53.47	W 104 12 45.27
	1630.00	9.02	78.25	1620.78	26.70	27.23	124.22	0.50	381279.22	537430.21	N 32 2 53.50	W 104 12 45.09
	1724.00	10.57	77.25	1713.41	30.04	30.63	139.85	1.66	381282.63	537445.83	N 32 2 53.53	W 104 12 44.91
	1818.00	11.39	77.81	1805.69	33.83	34.49	157.33	0.88	381286.49	537463.31	N 32 2 53.57	W 104 12 44.71
	1913.00	11.51	79.07	1898.80	37.53	38.27	175.80	0.29	381290.27	537481.79	N 32 2 53.61	W 104 12 44.49
	2007.00	10.77	75.13	1991.03	41.49	42.30	193.50	1.13	381294.30	537499.48	N 32 2 53.65	W 104 12 44.29
	2102.00	10.43	73.48	2084.41	46.14	47.02	210.32	0.48	381299.02	537516.30	N 32 2 53.69	W 104 12 44.09
	2196.00	10.19	72.83	2176.89	50.95	51.90	226.43	0.28	381303.89	537532.40	N 32 2 53.74	W 104 12 43.90
	2291.00	10.17	74.46	2270.39	55.61	56.63	242.53	0.30	381308.62	537548.51	N 32 2 53.79	W 104 12 43.72
	2385.00	10.33	74.03	2362.89	60.08	61.17	258.63	0.19	381313.16	537564.61	N 32 2 53.83	W 104 12 43.53
	2480.00	10.14	74.34	2456.38	64.62	65.77	274.87	0.21	381317.76	537580.85	N 32 2 53.88	W 104 12 43.34
	2574.00	10.26	75.14	2548.89	68.93	70.15	290.93	0.20	381322.14	537596.91	N 32 2 53.92	W 104 12 43.15
	2669.00	10.07	73.75	2642.40	73.36	74.64	307.08	0.33	381326.64	537613.06	N 32 2 53.97	W 104 12 42.97
	2763.00	10.25	73.61	2734.93	77.95	79.30	323.00	0.19	381331.30	537628.97	N 32 2 54.01	W 104 12 42.78
	2857.00	10.18	74.49	2827.44	82.46	83.88	339.02	0.18	381335.88	537644.99	N 32 2 54.06	W 104 12 42.60
	2952.00	9.97	75.77	2920.97	86.66	88.15	355.09	0.32	381340.14	537661.05	N 32 2 54.10	W 104 12 42.41
	3047.00	9.40	76.00	3014.62	90.50	92.05	370.58	0.60	381344.04	537676.55	N 32 2 54.14	W 104 12 42.23
	3141.00	9.42	75.93	3107.36	94.16	95.78	385.49	0.02	381347.77	537691.46	N 32 2 54.17	W 104 12 42.06
	3330.00	9.33	77.46	3293.83	101.12	102.86	415.45	0.14	381354.85	537721.41	N 32 2 54.24	W 104 12 41.71
	3424.00	9.59	77.07	3386.55	104.47	106.27	430.52	0.28	381358.26	537736.48	N 32 2 54.28	W 104 12 41.53
	3519.00	9.47	77.55	3480.24	107.86	109.73	445.87	0.15	381361.72	537751.83	N 32 2 54.31	W 104 12 41.35
	3616.00	9.10	78.32	3575.97	111.07	113.00	461.17	0.40	381364.99	537767.13	N 32 2 54.34	W 104 12 41.18
	3708.00	9.40	78.69	3666.77	113.95	115.94	475.66	0.33	381367.93	537781.62	N 32 2 54.37	W 104 12 41.01
	3802.00	10.07	76.73	3759.42	117.28	119.34	491.19	0.80	381371.33	537797.14	N 32 2 54.41	W 104 12 40.83
	3897.00	10.29	77.68	3852.93	120.93	123.05	507.56	0.29	381375.04	537813.52	N 32 2 54.44	W 104 12 40.64
	3991.00	10.27	78.36	3945.42	124.34	126.54	523.97	0.13	381378.52	537829.92	N 32 2 54.48	W 104 12 40.45
	4086.00	9.92	78.83	4038.95	127.56	129.83	540.29	0.38	381381.82	537846.24	N 32 2 54.51	W 104 12 40.26
	4180.00	9.41	78.49	4131.61	130.60	132.93	555.77	0.55	381384.92	537861.72	N 32 2 54.54	W 104 12 40.08
	4369.00	8.87	79.42	4318.21	136.24	138.69	585.23	0.30	381390.68	537891.18	N 32 2 54.60	W 104 12 39.73
	4558.00	8.46	79.34	4505.05	141.37	143.94	613.22	0.22	381395.92	537919.16	N 32 2 54.65	W 104 12 39.41
	4653.00	8.36	80.09	4599.03	143.79	146.42	626.89	0.16	381398.40	537932.83	N 32 2 54.67	W 104 12 39.25
	4842.00	7.88	79.80	4786.14	148.34	151.08	653.17	0.25	381403.06	537959.11	N 32 2 54.72	W 104 12 38.94
	4936.00	7.55	80.43	4879.28	150.46	153.24	665.60	0.36	381405.23	537971.54	N 32 2 54.74	W 104 12 38.80
	5031.00	7.80	80.68	4973.43	152.48	155.33	678.12	0.27	381407.31	537984.06	N 32 2 54.76	W 104 12 38.65
	5126.00	7.74	80.63	5067.56	154.52	157.41	690.79	0.06	381409.40	537996.73	N 32 2 54.78	W 104 12 38.51
	5220.00	7.60	81.11	5160.72	156.46	159.40	703.18	0.16	381411.39	538009.12	N 32 2 54.80	W 104 12 38.36
	5314.00	7.55	80.81	5253.90	158.35	161.35	715.42	0.07	381413.34	538021.35	N 32 2 54.82	W 104 12 38.22
	5409.00	7.25	81.40	5348.11	160.19	163.24	727.51	0.33	381415.23	538033.44	N 32 2 54.84	W 104 12 38.08
	5504.00	6.93	80.44	5442.38	161.99	165.09	739.08	0.36	381417.08	538045.02	N 32 2 54.86	W 104 12 37.95
	5599.00	6.72	70.21	5536.71	164.78	167.92	749.97	1.30	381419.91	538055.90	N 32 2 54.88	W 104 12 37.82
	5694.00	6.04	65.53	5631.12	168.69	171.88	759.75	0.90	381423.86	538065.68	N 32 2 54.92	W 104 12 37.71
	5789.00	5.02	62.33	5725.68	172.66	175.88	767.98	1.12	381427.86	538073.91	N 32 2 54.96	W 104 12 37.61
	5883.00	4.43	63.72	5819.36	176.15	179.40	774.87	0.64	381431.38	538080.80	N 32 2 55.00	W 104 12 37.53
	5978.00	3.42	63.93	5914.14	178.99	182.26	780.71	1.06	381434.25	538086.64	N 32 2 55.03	W 104 12 37.46
	6072.00	2.58	59.97	6008.01	181.27	184.56	785.06	0.92	381436.54	538090.99	N 32 2 55.05	W 104 12 37.41
	6166.00	2.36	51.50	6101.92	183.52	186.82	788.41	0.45	381438.80	538094.33	N 32 2 55.07	W 104 12 37.37
	6261.00	2.58	56.62	6196.83	185.90	189.21	791.72	0.33	381441.20	538097.65	N 32 2 55.09	W 104 12 37.33
	6355.00	3.10	70.11	6290.72	187.91	191.24	795.88	0.90	381443.22	538101.81	N 32 2 55.11	W 104 12 37.29
	6450.00	1.90	68.12	6385.63	189.35	192.70	799.76	1.27	381444.69	538105.68	N 32 2 55.13	W 104 12 37.24
	6544.00	1.11	65.48	6479.59	190.30	193.66	802.03	0.84	381445.64	538107.96	N 32 2 55.14	W 104 12 37.21
	6639.00	1.48	47.34	6574.57	191.51	194.87	803.77	0.58	381446.86	538109.70	N 32 2 55.15	W 104 12 37.19
	6734.00	1.19	47.60	6669.54	193.00	196.37	805.40	0.31	381448.35	538111.33	N 32 2 55.16	W 104 12 37.18
	6829.00	0.90	13.70	6764.53	194.38	197.76	806.31	0.70	381449.74	538112.23	N 32 2 55.18	W 104 12 37.16
	6924.00	0.83	13.82	6859.52	195.77	199.15	806.65	0.07	381451.14	538112.57	N 32 2 55.19	W 104 12 37.16
	7018.00	0.28	352.32	6953.51	196.66	200.04	806.78	0.62	381452.03	538112.70	N 32 2 55.20	W 104 12 37.16
	7113.00	0.48	315.73	7048.51	197.18	200.56	806.47	0.32	381452.54	538112.40	N 32 2 55.21	W 104 12 37.16
	7208.00	0.62	51.49	7143.51	197.78	201.16	806.59	0.86	381453.14	538112.52	N 32 2 55.21	W 104 12 37.16
	7302.00	1.03	81.75	7237.50	198.22	201.60	807.83	0.62	381453.58	538113.75	N 32 2 55.22	W 104 12 37.15
	7397.00	0.52	139.58	7332.49	198.01	201.40	808.95	0.92	381453.38	538114.88	N 32 2 55.21	W 104 12 37.13
	7491.00	0.53	131.95	7426.49	197.39	200.78	809.55	0.08	381452.76	538115.48	N 32 2 55.21	W 104 12 37.13
	7586.00	1.03	129.12	7521.48	196.55	199.95	810.54	0.53	381451.93	538116.47	N 32 2 55.20	W 104 12 37.12
	7681.00	1.17	125.15	7616.46	195.45	198.85	812.00	0.17	381450.83	538117.92	N 32 2 55.19	W 104 12 37.10
	7775.00	1.23	121.89	7710.44	194.36	197.77	813.64	0.10	381449.75	538119.56	N 32 2 55.18	W 104 12 37.08

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 ° ' ")
	7870.00	0.72	154.29	7805.43	193.27	196.69	814.76	0.77	381448.67	538120.69	N 32 2 55.17	W 104 12 37.07
	7964.00	0.13	141.52	7899.42	192.66	196.07	815.09	0.63	381448.06	538121.01	N 32 2 55.16	W 104 12 37.06
	8059.00	0.34	322.77	7994.42	192.80	196.21	814.98	0.49	381448.20	538120.91	N 32 2 55.16	W 104 12 37.06
	8153.00	0.28	257.92	8088.42	192.97	196.39	814.59	0.36	381448.37	538120.51	N 32 2 55.16	W 104 12 37.07
	8248.00	0.30	232.25	8183.42	192.77	196.19	814.17	0.14	381448.17	538120.09	N 32 2 55.16	W 104 12 37.07
	8297.00	0.56	182.66	8232.42	192.46	195.87	814.05	0.88	381447.85	538119.98	N 32 2 55.16	W 104 12 37.07
	8435.00	1.05	170.56	8370.40	190.54	193.95	814.23	0.37	381445.93	538120.15	N 32 2 55.14	W 104 12 37.07
	8549.00	1.08	162.86	8484.38	188.48	191.89	814.72	0.13	381443.87	538120.64	N 32 2 55.12	W 104 12 37.07
	8629.00	1.03	163.45	8564.37	187.06	190.48	815.14	0.06	381442.46	538121.07	N 32 2 55.11	W 104 12 37.06
	8724.00	0.94	176.34	8659.36	185.47	188.88	815.44	0.25	381440.87	538121.36	N 32 2 55.09	W 104 12 37.06
	8820.00	1.06	172.36	8755.34	183.80	187.22	815.61	0.14	381439.20	538121.53	N 32 2 55.07	W 104 12 37.06
	8912.00	1.06	165.93	8847.33	182.13	185.55	815.93	0.13	381437.53	538121.85	N 32 2 55.06	W 104 12 37.05
	9007.00	1.17	154.79	8942.31	180.40	183.82	816.55	0.26	381435.80	538122.48	N 32 2 55.04	W 104 12 37.05
	9101.00	0.40	120.60	9036.30	179.36	182.78	817.24	0.92	381434.77	538123.17	N 32 2 55.03	W 104 12 37.04
	9148.00	6.63	0.67	9083.20	181.99	185.42	817.42	14.55	381437.40	538123.34	N 32 2 55.06	W 104 12 37.04
	9196.00	13.45	354.52	9130.44	190.33	193.75	816.92	14.36	381445.74	538122.84	N 32 2 55.14	W 104 12 37.04
	9243.00	16.67	353.14	9175.82	202.47	205.89	815.59	6.89	381457.87	538121.51	N 32 2 55.26	W 104 12 37.06
	9291.00	19.93	353.22	9221.38	217.44	220.86	813.80	6.79	381472.84	538119.72	N 32 2 55.41	W 104 12 37.08
	9338.00	24.96	357.65	9264.81	235.33	238.73	812.45	11.28	381490.71	538118.37	N 32 2 55.58	W 104 12 37.09
	9386.00	29.03	4.79	9307.58	257.06	260.47	813.00	10.83	381512.45	538118.93	N 32 2 55.80	W 104 12 37.09
	9433.00	31.36	7.55	9348.21	280.54	283.96	815.56	5.77	381535.94	538121.49	N 32 2 56.03	W 104 12 37.06
	9480.00	34.31	6.12	9387.69	305.83	309.26	818.58	6.49	381561.23	538124.51	N 32 2 56.28	W 104 12 37.02
	9528.00	37.95	1.83	9426.46	334.04	337.48	820.50	9.23	381589.45	538126.42	N 32 2 56.56	W 104 12 37.00
	9575.00	44.18	358.80	9461.88	364.89	368.33	820.62	13.91	381620.30	538126.54	N 32 2 56.87	W 104 12 37.00
	9622.00	47.76	359.48	9494.55	398.68	402.11	820.11	7.69	381654.08	538126.04	N 32 2 57.20	W 104 12 37.00
	9669.00	51.91	0.52	9524.85	434.58	438.02	820.12	8.99	381689.98	538126.05	N 32 2 57.56	W 104 12 37.00
	9716.00	55.44	359.87	9552.69	472.44	475.88	820.25	7.59	381727.84	538126.17	N 32 2 57.93	W 104 12 37.00
	9764.00	59.49	359.38	9578.50	512.90	516.34	819.98	8.48	381768.29	538125.91	N 32 2 58.33	W 104 12 37.00
	9811.00	63.01	359.39	9601.10	554.10	557.54	819.54	7.49	381809.49	538125.46	N 32 2 58.74	W 104 12 37.01
	9859.00	68.06	357.56	9620.98	597.76	601.19	818.36	11.08	381853.14	538124.29	N 32 2 59.17	W 104 12 37.02
	9906.00	71.89	356.97	9637.07	641.87	645.29	816.25	8.23	381897.24	538122.18	N 32 2 59.61	W 104 12 37.04
	9953.00	72.58	357.24	9651.41	686.58	690.00	813.99	1.57	381941.93	538119.92	N 32 3 0.05	W 104 12 37.07
	10000.00	79.06	359.17	9662.92	732.11	735.52	812.58	14.35	381987.45	538118.50	N 32 3 0.50	W 104 12 37.08
	10048.00	86.24	0.98	9669.05	779.68	783.09	812.64	15.42	382035.02	538118.57	N 32 3 0.97	W 104 12 37.08
	10095.00	88.77	0.21	9671.10	826.62	830.04	813.13	5.63	382081.96	538119.06	N 32 3 1.43	W 104 12 37.08
	10143.00	88.65	359.29	9672.18	874.61	878.02	812.92	1.93	382129.94	538118.85	N 32 3 1.91	W 104 12 37.08
Heel HL Cross	*10148.00*	*88.65*	*359.25*	*9672.30*	*879.61*	*883.02*	*812.86*	*0.78*	*382134.94*	*538118.78*	*N 32 3 1.96*	*W 104 12 37.08*
	10208.00	88.65	358.78	9673.71	939.59	943.00	811.83	0.78	382194.91	538117.75	N 32 3 2.55	W 104 12 37.09
	10290.00	90.06	358.42	9674.64	1021.56	1024.96	809.82	1.77	382276.87	538115.75	N 32 3 3.36	W 104 12 37.11
	10385.00	89.38	354.83	9675.10	1116.40	1119.78	804.23	3.85	382371.68	538110.16	N 32 3 4.30	W 104 12 37.18
	10480.00	88.82	350.52	9676.59	1210.64	1213.97	792.13	4.57	382465.86	538098.05	N 32 3 5.23	W 104 12 37.32
	10574.00	88.77	349.62	9678.57	1303.28	1306.54	775.92	0.96	382558.42	538081.85	N 32 3 6.15	W 104 12 37.50
	10669.00	88.77	348.64	9680.61	1396.63	1399.82	758.01	1.03	382651.69	538063.94	N 32 3 7.07	W 104 12 37.71
	10763.00	88.88	347.75	9682.54	1488.70	1491.81	738.78	0.95	382743.67	538044.71	N 32 3 7.98	W 104 12 37.93
	10858.00	89.83	347.46	9683.61	1581.56	1584.59	718.39	1.05	382836.44	538024.33	N 32 3 8.90	W 104 12 38.17
	10953.00	89.27	347.25	9684.35	1674.34	1677.28	697.60	0.63	382929.13	538003.53	N 32 3 9.82	W 104 12 38.41
	11047.00	90.39	347.47	9684.63	1766.15	1769.00	677.03	1.21	383020.84	537982.97	N 32 3 10.73	W 104 12 38.65
	11142.00	90.28	347.23	9684.08	1858.93	1861.69	656.22	0.28	383113.52	537962.16	N 32 3 11.65	W 104 12 38.89
	11236.00	90.06	349.64	9683.80	1951.09	1953.77	637.38	2.57	383205.60	537943.32	N 32 3 12.56	W 104 12 39.10
	11330.00	90.06	351.26	9683.70	2043.85	2046.47	621.78	1.72	383298.28	537927.73	N 32 3 13.47	W 104 12 39.28
	11425.00	90.34	350.71	9683.37	2137.73	2140.29	606.90	0.65	383392.10	537912.84	N 32 3 14.40	W 104 12 39.46
	11519.00	90.28	355.84	9682.86	2231.10	2233.62	595.90	5.46	383485.41	537901.84	N 32 3 15.33	W 104 12 39.58
	11614.00	90.11	356.78	9682.53	2325.93	2328.42	589.78	1.01	383580.20	537895.73	N 32 3 16.26	W 104 12 39.65
	11708.00	92.02	359.63	9680.79	2419.86	2422.34	586.84	3.65	383674.12	537892.78	N 32 3 17.19	W 104 12 39.69
	11803.00	90.84	1.00	9678.42	2514.82	2517.31	587.36	1.90	383769.08	537893.31	N 32 3 18.13	W 104 12 39.68
	11898.00	91.29	3.36	9676.65	2609.71	2612.21	590.97	2.53	383863.97	537896.92	N 32 3 19.07	W 104 12 39.63
	11992.00	90.11	5.32	9675.50	2703.40	2705.93	598.08	2.43	383957.68	537904.03	N 32 3 20.00	W 104 12 39.55
	12087.00	89.38	9.82	9675.92	2797.49	2800.08	610.60	4.80	384051.82	537916.54	N 32 3 20.93	W 104 12 39.40
	12181.00	89.78	8.98	9676.61	2890.16	2892.81	625.95	0.99	384144.55	537931.89	N 32 3 21.85	W 104 12 39.22
	12276.00	89.83	13.95	9676.94	2983.16	2985.89	644.83	5.23	384237.61	537950.77	N 32 3 22.77	W 104 12 39.00
	12371.00	90.22	15.56	9676.90	3074.92	3077.75	669.02	1.74	384329.47	537974.96	N 32 3 23.68	W 104 12 38.72
	12465.00	91.07	15.12	9675.84	3165.46	3168.39	693.89	1.02	384420.10	537999.82	N 32 3 24.58	W 104 12 38.43
	12559.00	90.84	11.68	9674.27	3256.78	3259.81	715.66	3.67	384511.51	538021.60	N 32 3 25.48	W 104 12 38.18
	12654.00	90.22	10.86	9673.39	3349.87	3352.97	734.23	1.08	384604.66	538040.16	N 32 3 26.40	W 104 12 37.96
	12749.00	90.17	10.42	9673.07	3443.16	3446.34	751.77	0.47	384698.02	538057.70	N 32 3 27.33	W 104 12 37.76
	12843.00	90.90	8.98	9672.19	3535.74	3538.99	767.61	1.72	384790.66	538073.54	N 32 3 28.24	W 104 12 37.57
	12938.00	91.35	8.09	9670.33	3629.61	3632.91	781.70	1.05	384884.58	538087.63	N 32 3 29.17	W 104 12 37.41
	13033.00	90.84	7.54	9668.51	3723.65	3727.01	794.62	0.79	384978.67	538100.54	N 32 3 30.10	W 104 12 37.25
	13127.00	91.29	7.48	9666.76	3816.78	3820.19	806.90	0.48	385071.84	538112.83	N 32 3 31.02	W 104 12 37.11
	13222.00	92.02	9.02	9664.02	3910.69	3914.17	820.53	1.79	385165.81	538126.45	N 32 3 31.95	W 104 12 36.95
	13316.00	91.40	8.38	9661.21	4003.51	4007.04	834.74	0.95	385258.68	538140.66	N 32 3 32.87	W 104 12 36.78
	13411.00	91.29	8.14	9658.98	4097.44	4101.03	848.38	0.28	385352.66	538154.30	N 32 3 33.80	W 104 12 36.62
	13505.00	91.40	7.52	9656.78	4190.48	4194.13	861.18	0.67	385445.75	538167.11	N 32 3 34.72	W 104 12 36.47
	13600.00	91.29	6.85	9654.55	4284.66	4288.36	873.06	0.71	385539.96	538178.98	N 32 3 35.66	W 104 12 36.34
	13694.00	91.23	5.90	9652.48	4378.01	4381.75	883.50	1.01	385633.35	538189.42	N 32 3 36.58	W 104 12 36.21
	13789.00	90.79	6.11	9650.81	4472.43	4476.21	893.43	0.51	385727.81	538199.35	N 32 3 37.52	W 104 12 36.10
	13884.00	89.33	4.46	9650.71	4566.99	4570.80	902.18	2.32	385822.39	538208.10	N 32 3 38.45	W 104 12 35.99
	13978.00	92.36	5.35	9649.32	4660.58	4664.44	910.22	3.36	385916.01	538216.14	N 32 3 39.38	W 104 12 35.90
	14073.00	90.39	0.59	9647.04	4755.38	4759.25	915.14	5.42	386010.82	538221.05	N 32 3 40.32	W 104 12 35.84
	14167.00	90.39	358.89	9646.40	4849.37	4853.25	914.71	1.81	386104.80	538220.63	N 32 3 41.25	W 104 12 35.84
	14262.00	89.89	356.93	9646.17	4944.32	4948.18	911.25	2.13	386199.72	538217.16	N 32 3 42.19	W 104 12 35.88
	14356.00	89.83	358.05	9646.40	5038.24	5042.08	907.13	1.19	386293.62	538213.05	N 32 3 43.12	W 104 12 35.93
	14451.00	89.61	358.90	9646.86	5133.21	5137.05	904.60	0.92	386388.58	538210.52	N 32 3 44.05	W 104 12 35.96
	14546.00	87.70	359.13	9649.09	5228.18	5232.00	902.97	2.03	386483.53	538208.89	N 32 3 44.99	W 104 12 35.97
	14640.00	89.72	359.09	9651.21	5322.14	5325.96	901.51	2.15	386577.48	538207.43	N 32 3 45.92	W 104 12 35.99
	14735.00	90.73	359.77	9650.83	5417.14	5420.96	900.56	1.28	386672.46	538206.48	N 32 3 46.86	W 104 12 36.00
	14829.00	91.07	359.26	9649.36	5511.12	5514.94	899.77	0.65	386766.44	538205.69	N 32 3 47.79	W 104 12 36.01
	14924.00	91.63	359.53	9647.12	5606.10	5609.91	898.77	0.65	386861.40	538204.68	N 32 3 48.73	W 104 12 36.02
	15018.00	90.95	359.23	9645.00	5700.07	5703.88	897.75	0.79	386955.36	538203.67	N 32 3 49.66	W 104 12 36.03
	15113.00	89.66	359.88	9644.50	5795.06	5798.87	897.01	1.52	387050.34	538202.93	N 32 3 50.60	W 104 12 36.04
	15207.00	88.43	359.93	9646.06	5889.05	5892.86	896.86	1.31	387144.32	538202.77	N 32 3 51.53	W 104 12 36.04
	15302.00	88.82	1.54	9648.34	5984.00	5987.82	898.07	1.74	387239.27	538203.99	N 32 3 52.47	W 104 12 36.02
	15397.00	88.54	0.70	9650.53	6078.95	6082.77	899.93	0.93	387334.22	538205.85	N 32 3 53.41	W 104 12 36.00
	15492.00	88.37	0.74	9653.09	6173.90	6177.73	901.12	0.18	387429.17	538207.04	N 32 3 54.35	W 104 12 35.98
	15586.00	88.60	1.14	9655.58	6267.85	6271.69	902.67	0.49	387523.11	538208.58	N 32 3 55.28	W 104 12 35.96
	15681.00	88.99	1.17	9657.58	6362.80	6366.65	904.58	0.41	387618.07	538210.50	N 32 3 56.22	W 104 12 35.94
	15776.00	89.10	1.36	9659.16	6457.76	6461.61	906.68	0.23	387713.02	538212.59	N 32 3 57.16	W 104 12 35.92
	15870.00	87.25	0.48	9662.15	6551.68	6555.55	908.19	2.18	387806.95	538214.10	N 32 3 58.09	W 104 12 35.90
	15966.00	86.41	0.75	9667.46	6647.53	6651.39	909.21	0.92	387902.78	538215.13	N 32 3 59.04	W 104 12 35.88
	16060.00	86.80	0.56	9673.03	6741.35	6745.22	910.29	0.46	387996.60	538216.20	N 32 3 59.97	W 104 12 35.87
	16155.00	86.46	0.28	9678.61	6836.18	6840.05	910.98	0.46	388091.43	538216.90	N 32 4 0.91	W 104 12 35.86
	16249.00	86.97	0.24	9684.00	6930.02	6933.90	911.41	0.54	388185.26	538217.32	N 32 4 1.84	W 104 12 35.85
	16344.00	87.30	359.55	9688.75	7024.90	7028.78	911.23	0.80	388280.14	538217.15	N 32 4 2.77	W 104 12 35.86
	16532.00	89.27	0.01	9694.37	7212.81	7216.68	910.51	1.08	388468.02	538216.43	N 32 4 4.63	W 104 12 35.86
	16627.00	86.64	358.49	9697.76	7307.73	7311.60	909.27	3.20	388562.94	538215.19	N 32 4 5.57	W 104 12 35.87
	16722.00	89.05	359.51	9701.34	7402.65	7406.51	907.62	2.75	388657.84	538213.53	N 32 4 6.51	W 104 12 35.89
	16816.00	89.05	0.28	9702.90	7496.63	7500.50	907.44	0.82	388751.81	538213.36	N 32 4 7.44	W 104 12 35.89
	16910.00	90.28	359.73	9703.44	7590.63	7594.50	907.45	1.43	388845.80	538213.37	N 32 4 8.37	W 104 12 35.89
	17005.00	89.55	359.03	9703.59	7685.62	7689.49	906.42	1.06	388940.79	538212.34	N 32 4 9.31	W 104 12 35.90

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 ° ' ")
	17100.00	91.01	358.30	9703.12	7780.60	7784.46	904.21	1.72	389035.75	538210.13	N 32 4 10.25	W 104 12 35.93
	17194.00	89.21	359.43	9702.94	7874.59	7878.43	902.35	2.26	389129.72	538208.27	N 32 4 11.18	W 104 12 35.95
	17289.00	88.93	0.29	9704.48	7969.57	7973.42	902.12	0.95	389224.69	538208.03	N 32 4 12.12	W 104 12 35.95
	17383.00	91.46	2.98	9704.16	8063.51	8067.37	904.80	3.93	389318.63	538210.72	N 32 4 13.05	W 104 12 35.92
	17478.00	91.01	1.86	9702.12	8158.38	8162.26	908.81	1.27	389413.51	538214.72	N 32 4 13.99	W 104 12 35.87
	17573.00	92.41	2.24	9699.28	8253.26	8257.15	912.20	1.53	389508.40	538218.12	N 32 4 14.93	W 104 12 35.83
	17667.00	92.58	2.92	9695.19	8347.05	8350.97	916.43	0.75	389602.20	538222.35	N 32 4 15.86	W 104 12 35.78
	17762.00	89.55	1.84	9693.42	8441.93	8445.86	920.38	3.39	389697.08	538226.29	N 32 4 16.80	W 104 12 35.73
	17857.00	90.11	2.61	9693.70	8536.84	8540.78	924.06	1.00	389792.00	538229.98	N 32 4 17.74	W 104 12 35.69
	17951.00	88.15	2.79	9695.13	8630.70	8634.66	928.49	2.09	389885.87	538234.41	N 32 4 18.67	W 104 12 35.63
	18046.00	89.33	2.52	9697.22	8725.55	8729.54	932.89	1.27	389980.74	538238.80	N 32 4 19.60	W 104 12 35.58
	18140.00	89.89	1.12	9697.86	8819.49	8823.48	935.88	1.60	390074.68	538241.79	N 32 4 20.53	W 104 12 35.54
	18235.00	88.37	0.39	9699.30	8914.46	8918.46	937.13	1.77	390169.65	538243.04	N 32 4 21.47	W 104 12 35.53
	18329.00	90.62	1.17	9700.13	9008.43	9012.44	938.41	2.53	390263.62	538244.32	N 32 4 22.40	W 104 12 35.51
	18424.00	91.01	0.76	9698.78	9103.40	9107.42	940.01	0.60	390358.59	538245.92	N 32 4 23.34	W 104 12 35.49
	18518.00	89.66	359.34	9698.23	9197.39	9201.41	940.09	2.08	390452.57	538246.00	N 32 4 24.27	W 104 12 35.49
	18613.00	89.66	358.93	9698.79	9292.39	9296.40	938.65	0.43	390547.55	538244.57	N 32 4 25.21	W 104 12 35.51
	18707.00	90.34	359.98	9698.79	9386.38	9390.39	937.76	1.33	390641.54	538243.67	N 32 4 26.14	W 104 12 35.52
	18802.00	89.78	359.80	9698.70	9481.38	9485.39	937.58	0.62	390736.53	538243.49	N 32 4 27.08	W 104 12 35.52
	18897.00	90.17	359.57	9698.74	9576.38	9580.39	937.06	0.48	390831.52	538242.97	N 32 4 28.02	W 104 12 35.52
	18991.00	91.01	359.44	9697.77	9670.38	9674.38	936.24	0.90	390925.50	538242.16	N 32 4 28.95	W 104 12 35.53
	19086.00	91.35	359.33	9695.81	9765.35	9769.36	935.22	0.38	391020.46	538241.14	N 32 4 29.89	W 104 12 35.54
	19181.00	91.40	0.09	9693.53	9860.33	9864.33	934.74	0.80	391115.43	538240.66	N 32 4 30.83	W 104 12 35.54
	19370.00	89.16	358.36	9692.61	10049.30	10053.29	932.19	1.50	391304.37	538238.10	N 32 4 32.70	W 104 12 35.57
	19465.00	89.27	358.43	9693.91	10144.26	10148.24	929.53	0.14	391399.32	538235.44	N 32 4 33.64	W 104 12 35.60
	19560.00	89.10	358.28	9695.26	10239.22	10243.19	926.80	0.24	391494.26	538232.71	N 32 4 34.58	W 104 12 35.63
	19654.00	90.28	359.32	9695.77	10333.20	10337.17	924.83	1.67	391588.22	538230.75	N 32 4 35.51	W 104 12 35.65
	19749.00	90.45	1.30	9695.17	10428.19	10432.16	925.34	2.09	391683.21	538231.26	N 32 4 36.45	W 104 12 35.65
	19844.00	90.17	1.54	9694.65	10523.15	10527.13	927.70	0.39	391778.17	538233.61	N 32 4 37.39	W 104 12 35.62
	19939.00	91.23	1.93	9693.49	10618.09	10622.08	930.58	1.19	391873.11	538236.49	N 32 4 38.33	W 104 12 35.58
	20033.00	91.07	2.02	9691.60	10712.00	10716.00	933.81	0.20	391967.02	538239.73	N 32 4 39.26	W 104 12 35.54
	20128.00	91.80	2.55	9689.22	10806.87	10810.90	937.60	0.95	392061.91	538243.51	N 32 4 40.20	W 104 12 35.50
Toe HL Cross	*20183.00*	*90.65*	*1.95*	*9688.05*	*10861.81*	*10865.84*	*939.76*	*2.36*	*392116.85*	*538245.67*	*N 32 4 40.74*	*W 104 12 35.47*
	20222.00	89.83	1.53	9687.89	10900.78	10904.82	940.95	2.36	392155.83	538246.86	N 32 4 41.13	W 104 12 35.46
Last SLB MWD Survey	20289.00	90.11	1.60	9687.92	10967.75	10971.80	942.78	0.43	392222.79	538248.69	N 32 4 41.79	W 104 12 35.44
Projection to Bit	20331.00	90.11	1.60	9687.84	11009.73	11013.78	943.95	0.00	392264.77	538249.86	N 32 4 42.21	W 104 12 35.42

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 3 *** 3-D 97.071% Confidence 3.0000 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	28.000	1/98.425	30.000	30.000	A001Ma_MWD-Depth Only	Original Borehole / Chevron HH SO 8 5 FED 003 No. 4H MWD to
	1	28.000	28.000	Act Stns	30.000	30.000	A001Ma_MWD-Depth Only	Original Borehole / Chevron HH SO 8 5 FED 003 No. 4H MWD to
	1	28.000	452.000	Act Stns	30.000	30.000	A001Ma_MWD	Original Borehole / Chevron HH SO 8 5 FED 003 No. 4H MWD to
	1	452.000	20331.000	Act Stns	30.000	30.000	B001Ma_MWD+HDGM	Original Borehole / Chevron HH SO 8 5 FED 003 No. 4H MWD to

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NMOCD-OCD ARTESIA
REC'D: 5/04/2020

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NMNM100549

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. NMNM138618

2. Name of Operator CHEVRON USA INC
Contact: KAYLA MCCONNELL
E-Mail: gncv@chevron.com

8. Lease Name and Well No. HH SO 8 5 FED 003 4H

3. Address 6301 DEAUVILLE BLVD
MIDLAND, TX 79706

3a. Phone No. (include area code) Ph: 432-687-7375

9. API Well No. 30-015-45118

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface Sec 17 T26S R27E Mer 554FNL 2309FWL 32.048241 N Lat, 104.213425 W Lon
At top prod interval reported below Sec 17 T26S R27E Mer 330FSL 2179FEL 32.050664 N Lat, 104.210794 W Lon
At total depth Sec 5 T26S R27E Mer 182FNL 2007FEL 32.078515 N Lat, 104.210334 W Lon

10. Field and Pool, or Exploratory PURPLE SAGE WOLFCAMP

11. Sec., T., R., M., or Block and Survey or Area Sec 17 T26S R27E Mer

12. County or Parish EDDY

13. State NM

14. Date Spudded 09/21/2018

15. Date T.D. Reached 05/15/2019

16. Date Completed ☐ D & A ☒ Ready to Prod. 11/27/2019

17. Elevations (DF, KB, RT, GL)* 3265 GL

18. Total Depth: MD 20331 TVD 9687

19. Plug Back T.D.: MD TVD

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) GR

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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J-55	54.5	0	488		461		0	
12.250	9.625 HCL-80	43.5	0	8355	1967	1740		0	
8.500	5.500 P110	20.0	0	20331		3421		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	9287	9265						

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	10200	20171	10200 TO 20171			OPEN
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
10200 TO 20171	FRAC W/1051079 BBLS FLUID & 24.4 MM# PROPPANT

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
11/27/2019	12/16/2019	24	→	424.0	4147.0	3647.0	56.5	0.76	FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
64	1151	7.0	→	424	4147	3647		PGW

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. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

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

ELECTRONIC SUBMISSION #504448 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

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	55
				LAMAR	2116
				BELL CANYON	2167
				CHERRY CANYON	2998
				BRUSHY CANYON	4100
				BONE SPRING	5821
				AVALON	6381
				WOLFCAMP	8938

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 #504448 Verified by the BLM Well Information System.
For CHEVRON USA INC, sent to the Carlsbad

Name *(please print)* KAYLA MCCONNELL Title PERMITTING SPECIALIST

Signature (Electronic Submission) Date 02/25/2020

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 fradulent statements or representations as to any matter within its jurisdiction.

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