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

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

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JAN 09 2020

EMERALD-OCD ARTESIA

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-45115	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code	⁵ Property Name HH SO 8 5 FED 003	⁶ Well Number 1H
⁷ OGRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.	⁹ Elevation 3267'

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.		629'	NORTH	2308'	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.		199'	NORTH	2182'	EAST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion-until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ FINAL LAST TAKE POINT X= 538,073' Y= 392,082' NAD 27 LAT. 32.077890° N LONG. 104.210412° W X= 579,256' Y= 392,139' NAD83/86 LAT. 32.078012° N LONG. 104.210907° W MID POINT X= 538,036' Y= 387,131' NAD 27 LAT. 32.064278° N LONG. 104.210550° W X= 579,219' Y= 387,188' NAD83/86 LAT. 32.064400° N LONG. 104.211044° W FINAL FIRST TAKE POINT X= 538,071' Y= 382,163' NAD 27 LAT. 32.050621° N LONG. 104.210453° W X= 579,255' Y= 382,220' NAD83/86 LAT. 32.050743° N LONG. 104.210947° W KICK OFF POINT X= 538,157' Y= 381,551' NAD 27 LAT. 32.048938° N LONG. 104.210179° W X= 579,341' Y= 381,608' NAD83/86 LAT. 32.049060° N LONG. 104.210673° W	ACTUAL BOTTOM HOLE LOCATION X= 538,075' Y= 392,248' NAD 27 LAT. 32.078347° N LONG. 104.210405° W X= 579,258' Y= 392,305' NAD83/86 LAT. 32.078468° N LONG. 104.210899° 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 1H WELL X= 537,306' Y= 381,177' NAD 27 LAT. 32.047913° N LONG. 104.212928° W X= 578,489' Y= 381,234' NAD83/86 LAT. 32.048034° N LONG. 104.213421° W ELEVATION +3267' NAVD 88	Final Last Take Point @ 19,534' MD 364.43' FNL, 2183.05' FEL 467.97' FWL Lease Sec. 5 Mid Point @ 14,580.57' MD Sec. 8 Final First Take Point @ 9,589' MD 358.70' FSL, 2226.22' FEL 429.90' FWL Lease Kick Off Point @ 8,550' MD 253.27' FNL, 2149.39' FEL Sec. 17	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 1/6/2020 Signature Date KAYLA MCCONNELL Printed Name GNCV@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 23008 PROFESSIONAL SURVEYOR Certificate Number 12/13/2019
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RP

Intent ☐ As Drilled ☒

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JAN 09 2020

EMNRD-OCD ARTESIA

API # 30-015-45115		Operator Name: CHEVRON USA INC		Property Name: HH SO 10 15 FED 003		Well Number 1H	
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Kick Off Point (KOP)

UL B	Section 17	Township 26S	Range 27E	Lot	Feet 253	From N/S N	Feet 2149	From E/W E	County EDDY
Latitude 32.049060					Longitude -104.210673			NAD 83	

First Take Point (FTP)

UL C	Section 8	Township 26S	Range 27E	Lot	Feet 358	From N/S S	Feet 2226	From E/W E	County EDDY
Latitude 32.050743					Longitude -104.210947			NAD 83	

Last Take Point (LTP)

UL B	Section 5	Township 26S	Range 27E	Lot	Feet 364	From N/S N	Feet 2183	From E/W E	County EDDY
Latitude 32.078012					Longitude -104.210907			NAD 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

Chevron HH SO 8 5 FED 003 No. 1H MWD to 19700ft Survey Geodetic Report (Def Survey)



Report Date: February 06, 2019 - 08:15 AM
Client: Chevron
Field: NM Eddy County (NAD 27)
Structure / Slot: Chevron HH SO 8 5 FED 003 No. 1H / Chevron HH SO 8 5 FED 003 No. 1H
Well: Chevron HH SO 8 5 FED 003 No. 1H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Chevron HH SO 8 5 FED 003 No. 1H MWD to 19700ft
Survey Date: February 06, 2019
Tort / AHD / DDI / ERD Ratio: 337.467' / 11701.658 ft / 6.927 / 1.272
Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 2' 52.48787", W 104° 12' 46.53618"
Location Grid N/E Y/X: N 381177.000 RUS, E 537306.000 RUS
CRS Grid Convergence Angle: 0.0639°
Grid Scale Factor: 0.99991068
Version / Patch: 2.10.753.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.760° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB = 28ft
TVD Reference Elevation: 3295.000 ft above MSL
Seabed / Ground Elevation: 3267.000 ft above MSL
Magnetic Declination: 7.257°
Total Gravity Field Strength: 998.4289mgm (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47805.156 nT
Magnetic Dip Angle: 59.688°
Declination Date: February 06, 2019
Magnetic Declination Model: HDGM 2019
North Reference: Grid North
Grid Convergence Used: 0.0639°
Total Corr Mag North->Grid North: 7.1930°
Local Coord Referenced To: Well Head

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 ° ' ")
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	381177.00	537306.00	N 32 2 52.49	W 104 12 46.54
First 3rd Part Survey	193.00	1.40	36.30	192.98	1.89	1.90	1.40	0.73	381178.90	537307.40	N 32 2 52.51	W 104 12 46.52
	282.00	1.30	69.20	281.96	3.12	3.13	2.98	0.87	381180.13	537308.98	N 32 2 52.52	W 104 12 46.50
	372.00	0.70	356.00	371.95	4.03	4.05	3.90	1.43	381181.05	537309.90	N 32 2 52.53	W 104 12 46.49
Last 3rd Party Survey	422.00	0.60	132.01	421.94	4.16	4.18	4.07	2.41	381181.18	537310.07	N 32 2 52.53	W 104 12 46.49
First SLB MWD Survey	504.00	0.76	144.26	503.94	3.43	3.45	4.71	0.26	381180.45	537310.71	N 32 2 52.52	W 104 12 46.48
	597.00	1.93	86.51	596.92	3.01	3.04	6.83	1.78	381180.04	537312.63	N 32 2 52.52	W 104 12 46.46
	689.00	4.05	65.06	688.79	4.46	4.51	11.13	2.57	381181.51	537317.12	N 32 2 52.53	W 104 12 46.41
	780.00	5.05	60.64	779.50	7.75	7.82	17.53	1.16	381184.82	537323.53	N 32 2 52.57	W 104 12 46.33
	873.00	5.50	58.79	872.11	12.04	12.14	24.91	0.52	381189.14	537330.91	N 32 2 52.61	W 104 12 46.25
	967.00	6.97	62.05	965.55	17.01	17.15	33.80	1.61	381194.15	537339.80	N 32 2 52.66	W 104 12 46.14
	1062.00	8.20	66.22	1059.71	22.39	22.58	45.09	1.42	381199.58	537351.09	N 32 2 52.71	W 104 12 46.01
	1156.00	8.93	65.57	1152.67	28.08	28.30	57.87	0.78	381205.30	537363.87	N 32 2 52.77	W 104 12 45.86
	1251.00	10.43	62.87	1246.31	34.97	35.27	72.24	1.65	381212.27	537378.23	N 32 2 52.84	W 104 12 45.70
	1345.00	12.18	62.55	1338.48	43.35	43.73	88.61	1.86	381220.72	537394.60	N 32 2 52.92	W 104 12 45.51
	1440.00	13.01	63.98	1431.20	52.59	53.04	107.11	0.93	381230.03	537413.10	N 32 2 53.01	W 104 12 45.29
	1534.00	14.07	66.54	1522.58	61.69	62.23	127.10	1.30	381239.22	537433.09	N 32 2 53.10	W 104 12 45.06
	1629.00	13.59	67.49	1614.83	70.48	71.10	148.01	0.56	381248.09	537454.00	N 32 2 53.19	W 104 12 44.82
	1723.00	15.16	63.38	1705.89	80.12	80.83	169.20	1.99	381257.83	537475.19	N 32 2 53.29	W 104 12 44.57
	1817.00	15.79	64.64	1796.48	91.02	91.82	191.75	0.76	381268.81	537497.73	N 32 2 53.39	W 104 12 44.31
	1911.00	15.57	67.57	1886.98	101.21	102.11	214.96	0.87	381279.10	537520.95	N 32 2 53.50	W 104 12 44.04
	2006.00	13.94	67.50	1978.85	110.36	111.36	237.32	1.72	381288.34	537543.30	N 32 2 53.59	W 104 12 43.78
	2100.00	12.74	68.17	2070.31	118.46	119.54	257.41	1.29	381296.53	537563.38	N 32 2 53.67	W 104 12 43.54
	2195.00	12.52	64.84	2163.01	126.66	127.82	276.45	0.80	381304.80	537582.43	N 32 2 53.75	W 104 12 43.32
	2290.00	13.51	62.42	2255.57	136.09	137.33	295.61	1.19	381314.32	537601.58	N 32 2 53.84	W 104 12 43.10
	2384.00	14.55	61.06	2346.76	146.81	148.13	315.67	1.16	381325.12	537621.64	N 32 2 53.95	W 104 12 42.87
	2479.00	14.39	60.61	2438.75	158.29	159.70	336.40	0.21	381336.68	537642.37	N 32 2 54.06	W 104 12 42.63
	2573.00	14.58	60.57	2529.76	169.75	171.24	356.88	0.20	381348.23	537662.85	N 32 2 54.18	W 104 12 42.39
	2668.00	14.39	59.72	2621.74	181.49	183.07	377.49	0.30	381360.05	537683.46	N 32 2 54.30	W 104 12 42.15
	2762.00	14.16	59.69	2712.84	193.10	194.76	397.51	0.24	381371.74	537703.47	N 32 2 54.41	W 104 12 41.92
	2856.00	13.71	58.72	2804.07	204.60	206.35	416.95	0.54	381383.33	537722.91	N 32 2 54.53	W 104 12 41.69
	2951.00	13.36	59.45	2896.44	215.94	217.77	436.03	0.41	381394.75	537741.99	N 32 2 54.64	W 104 12 41.47
	3046.00	12.10	58.71	2989.10	226.62	228.52	453.99	1.34	381405.50	537759.59	N 32 2 54.74	W 104 12 41.26
	3140.00	13.01	59.96	3080.85	236.96	238.94	471.57	1.01	381415.92	537777.52	N 32 2 54.85	W 104 12 41.05
	3235.00	13.11	62.04	3173.39	247.29	249.34	490.34	0.51	381426.32	537796.29	N 32 2 54.95	W 104 12 40.84
	3329.00	13.07	61.47	3264.95	257.28	259.42	509.09	0.14	381436.39	537815.05	N 32 2 55.05	W 104 12 40.62
	3423.00	14.25	65.84	3356.29	267.01	269.23	528.99	1.67	381446.20	537834.94	N 32 2 55.15	W 104 12 40.39
	3518.00	14.81	71.49	3448.26	275.56	277.87	551.17	1.60	381454.84	537857.12	N 32 2 55.23	W 104 12 40.13
	3612.00	13.84	73.03	3539.34	282.56	284.96	573.32	1.11	381461.94	537879.27	N 32 2 55.30	W 104 12 39.87
	3707.00	13.10	74.15	3631.72	288.73	291.22	594.54	0.83	381468.20	537900.49	N 32 2 55.36	W 104 12 39.62
	3801.00	12.46	71.39	3723.39	294.79	297.37	614.40	0.94	381474.34	537920.34	N 32 2 55.42	W 104 12 39.39
	3896.00	13.44	68.97	3815.98	301.94	304.60	634.42	1.18	381481.57	537940.36	N 32 2 55.50	W 104 12 39.16
	3990.00	14.70	65.16	3907.16	310.78	313.53	655.44	1.66	381490.50	537961.38	N 32 2 55.58	W 104 12 38.92
	4085.00	14.59	65.74	3999.07	320.67	323.51	677.29	0.19	381500.48	537983.23	N 32 2 55.68	W 104 12 38.66
	4179.00	13.57	66.31	4090.24	329.88	332.81	698.18	1.10	381509.78	538004.12	N 32 2 55.77	W 104 12 38.42
	4273.00	12.55	67.56	4181.81	338.13	341.14	717.72	1.13	381518.10	538023.65	N 32 2 55.86	W 104 12 38.19
	4368.00	11.66	68.08	4274.70	345.57	348.66	736.16	0.94	381525.63	538042.10	N 32 2 55.93	W 104 12 37.98
	4462.00	10.93	69.27	4366.88	352.20	355.36	753.31	0.82	381532.33	538059.24	N 32 2 56.00	W 104 12 37.78
	4557.00	9.96	69.33	4460.30	358.22	361.45	769.42	1.02	381538.42	538075.35	N 32 2 56.06	W 104 12 37.59
	4652.00	9.39	70.89	4553.95	363.60	366.89	784.43	0.66	381543.85	538090.36	N 32 2 56.11	W 104 12 37.42
	4746.00	9.04	72.47	4646.74	368.27	371.62	798.72	0.46	381548.59	538104.65	N 32 2 56.16	W 104 12 37.25
	4841.00	7.49	65.42	4740.75	373.04	376.44	811.47	1.95	381553.41	538117.39	N 32 2 56.20	W 104 12 37.10
	4935.00	5.39	61.25	4834.15	377.67	381.12	820.91	2.29	381558.08	538126.84	N 32 2 56.25	W 104 12 36.99
	5030.00	5.21	61.81	4928.75	381.83	385.30	828.62	0.20	381562.27	538134.55	N 32 2 56.29	W 104 12 36.90
	5125.00	3.97	57.25	5023.44	385.62	389.12	835.19	1.36	381566.08	538141.12	N 32 2 56.33	W 104 12 36.83
	5219.00	2.32	56.88	5117.30	388.40	391.92	839.52	1.76	381568.88	538145.45	N 32 2 56.36	W 104 12 36.78
	5313.00	1.15	69.75	5211.25	389.75	393.28	842.00	1.30	381570.25	538147.92	N 32 2 56.37	W 104 12 36.75
	5408.00	0.90	75.37	5306.24	390.26	393.80	843.62	0.28	381570.77	538149.54	N 32 2 56.38	W 104 12 36.73
	5503.00	0.94	78.05	5401.22	390.61	394.15	845.10	0.06	381571.12	538151.02	N 32 2 56.38	W 104 12 36.71
	5597.00	0.67	77.91	5495.21	390.88	394.43	846.39	0.29	381571.39	538152.32	N 32 2 56.38	W 104 12 36.70
	5692.00	0.39	115.39	5590.21	390.85	394.40	847.23	0.45	381571.37	538153.15	N 32 2 56.38	W 104 12 36.69
	5787.00	0.29	140.12	5685.21	390.53	394.08	847.68	0.18	381571.05	538153.60	N 32 2 56.38	W 104 12 36.68
	5882.00	0.28	137.27	5780.21	390.17	393.73	847.99	0.02	381570.69	538153.91	N 32 2 56.37	W 104 12 36.68
	5976.00	0.40	125.21	5874.21	389.81	393.37	848.41	0.15	381570.33	538154.33	N 32 2 56.37	W 104 12 36.67
	6070.00	0.11	159.92	5968.21	389.54	393.09	848.71	0.34	381570.06	538154.63	N 32 2 56.37	W 104 12 36.67
	6165.00	0.20	242.98	6063.21	389.38	392.93	848.59	0.23	381569.90	538154.52	N 32 2 56.37	W 104 12 36.67
	6259.00	0.68	189.49	6157.20	388.75	392.31	848.36	0.62	381569.27	538154.28	N 32 2 56.36	W 104 12 36.67
	6354.00	1.12	176.27	6252.19	387.27	390.83	848.32	0.51	381567.79	538154.25	N 32 2 56.35	W 104 12 36.68
	6448.00	1.38	168.13	6346.17	385.24	388.80	848.62	0.33	381565.77	538154.54	N 32 2 56.33	W 104 12 36.67
	6543.00	1.67	161.66	6441.13	382.81	386.37	848.29	0.35	381563.33	538155.21	N 32 2 56.30	W 104 12 36.66
	6638.00	1.65	162.30	6536.09	380.19	383.75	850.14	0.03	381560.72	538156.06	N 32 2 56.28	W 1

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 ° ' '')
	6828.00	0.43	183.29	6726.06	377.07	380.64	850.45	0.47	381557.60	538156.37	N 32 2 56.25	W 104 12 36.65
	6923.00	0.58	215.12	6821.06	376.32	379.89	850.15	0.33	381556.85	538156.07	N 32 2 56.24	W 104 12 36.65
	7017.00	0.28	187.08	6915.06	375.71	379.27	849.85	0.38	381556.23	538155.77	N 32 2 56.23	W 104 12 36.66
	7112.00	0.13	194.19	7010.06	375.37	378.93	849.79	0.16	381555.80	538155.72	N 32 2 56.23	W 104 12 36.66
	7207.00	0.36	240.31	7105.06	375.12	378.68	849.51	0.30	381555.65	538155.43	N 32 2 56.23	W 104 12 36.66
	7301.00	0.39	225.86	7199.05	374.75	378.31	849.02	0.11	381555.28	538154.94	N 32 2 56.22	W 104 12 36.67
	7396.00	0.32	253.64	7294.05	374.46	378.01	848.53	0.19	381554.98	538154.46	N 32 2 56.22	W 104 12 36.67
	7490.00	0.34	172.75	7388.05	374.11	377.66	848.32	0.46	381554.63	538154.24	N 32 2 56.22	W 104 12 36.68
	7585.00	0.28	129.53	7483.05	373.68	377.24	848.53	0.25	381554.20	538154.46	N 32 2 56.21	W 104 12 36.67
	7680.00	0.25	144.64	7578.05	373.36	376.92	848.83	0.08	381553.88	538154.75	N 32 2 56.21	W 104 12 36.67
	7774.00	0.36	143.01	7672.05	372.96	376.52	849.13	0.12	381553.48	538155.05	N 32 2 56.20	W 104 12 36.67
	7868.00	0.20	187.07	7766.05	372.56	376.12	849.29	0.27	381553.08	538155.21	N 32 2 56.20	W 104 12 36.66
	7963.00	0.28	131.93	7861.05	372.24	375.80	849.44	0.25	381552.76	538155.36	N 32 2 56.20	W 104 12 36.66
	8058.00	0.52	149.05	7956.04	371.71	375.27	849.83	0.28	381552.24	538155.75	N 32 2 56.19	W 104 12 36.66
	8152.00	0.43	150.58	8050.04	371.03	374.60	850.22	0.10	381551.57	538156.15	N 32 2 56.19	W 104 12 36.65
	8247.00	0.08	71.72	8145.04	370.74	374.31	850.46	0.44	381551.28	538156.39	N 32 2 56.18	W 104 12 36.65
	8336.00	0.23	95.43	8234.04	370.75	374.31	850.70	0.18	381551.28	538156.62	N 32 2 56.18	W 104 12 36.65
	8450.00	0.28	106.06	8348.04	370.64	374.21	851.20	0.06	381551.18	538157.12	N 32 2 56.18	W 104 12 36.64
	8544.00	0.45	210.30	8442.04	370.26	373.83	851.23	0.62	381550.80	538157.15	N 32 2 56.18	W 104 12 36.64
	8591.00	3.82	320.12	8489.00	371.31	374.87	850.13	8.50	381551.84	538156.05	N 32 2 56.19	W 104 12 36.65
	8639.00	8.42	328.98	8536.72	375.56	379.11	847.29	9.76	381556.08	538153.22	N 32 2 56.23	W 104 12 36.69
	8686.00	13.72	333.37	8582.83	383.52	387.05	843.02	11.41	381564.02	538148.94	N 32 2 56.31	W 104 12 36.74
	8734.00	16.33	333.68	8629.18	394.68	398.19	837.48	5.44	381575.15	538143.40	N 32 2 56.42	W 104 12 36.80
	8781.00	16.45	331.70	8674.27	406.49	409.97	831.39	1.22	381586.94	538137.31	N 32 2 56.54	W 104 12 36.87
	8828.00	22.24	333.04	8718.60	420.32	423.77	824.20	12.35	381600.73	538130.12	N 32 2 56.67	W 104 12 36.95
	8875.00	28.33	335.13	8761.08	438.41	441.83	815.47	13.09	381618.79	538121.39	N 32 2 56.85	W 104 12 37.06
	8923.00	33.27	339.02	8802.30	461.10	464.48	805.96	11.09	381641.43	538111.88	N 32 2 57.08	W 104 12 37.17
	8970.00	32.67	336.10	8841.73	484.77	488.11	796.20	3.61	381665.07	538102.13	N 32 2 57.31	W 104 12 37.28
	9017.00	37.45	341.13	8880.20	509.95	513.25	786.43	11.88	381690.21	538092.36	N 32 2 57.56	W 104 12 37.39
	9064.00	37.94	341.84	8917.39	537.24	540.50	777.31	1.39	381717.45	538083.24	N 32 2 57.83	W 104 12 37.50
	9112.00	39.61	351.50	8954.85	566.45	569.69	770.44	13.08	381746.63	538076.37	N 32 2 58.12	W 104 12 37.58
	9155.00	40.53	355.46	8987.76	593.96	597.18	767.31	6.30	381774.12	538073.24	N 32 2 58.39	W 104 12 37.61
	9202.00	45.84	353.97	9022.02	625.98	629.19	764.32	11.50	381806.13	538070.25	N 32 2 58.71	W 104 12 37.65
	9249.00	52.79	356.04	9052.64	661.48	664.67	761.26	15.16	381841.61	538067.19	N 32 2 59.06	W 104 12 37.68
	9296.00	58.70	0.17	9079.09	700.28	703.47	760.02	14.52	381880.40	538065.95	N 32 2 59.44	W 104 12 37.70
	9343.00	65.59	2.18	9101.04	741.79	744.99	760.90	15.14	381921.92	538066.83	N 32 2 59.85	W 104 12 37.69
	9391.00	72.77	2.44	9118.09	786.58	789.79	762.71	14.97	381966.71	538068.64	N 32 3 0.29	W 104 12 37.66
	9438.00	80.71	1.72	9128.86	832.26	835.47	764.36	16.96	382012.39	538070.29	N 32 3 0.75	W 104 12 37.64
	9486.00	87.49	0.31	9133.79	879.96	883.17	765.20	14.42	382060.09	538071.13	N 32 3 1.22	W 104 12 37.63
Heel HL Cross	9533.00	87.83	359.97	9135.71	926.92	930.14	765.32	1.02	382107.05	538071.25	N 32 3 1.68	W 104 12 37.63
	9560.00	88.58	0.10	9136.56	953.91	957.12	765.33	2.83	382134.03	538071.26	N 32 3 1.95	W 104 12 37.63
	9580.00	89.14	0.20	9136.95	973.90	977.12	765.39	2.83	382154.03	538071.32	N 32 3 2.15	W 104 12 37.63
	9638.00	91.00	0.68	9136.88	1031.90	1035.11	765.83	3.31	382212.02	538071.76	N 32 3 2.72	W 104 12 37.63
	9698.00	91.44	358.38	9135.61	1091.88	1095.10	765.86	2.29	382272.00	538071.79	N 32 3 3.32	W 104 12 37.62
	9793.00	89.38	355.74	9134.93	1186.79	1189.99	761.82	4.40	382366.88	538067.75	N 32 3 4.26	W 104 12 37.67
	9899.00	89.07	355.79	9136.36	1292.52	1295.69	753.99	0.30	382472.57	538059.92	N 32 3 5.30	W 104 12 37.76
	9994.00	88.90	356.37	9138.04	1387.31	1390.45	747.50	0.84	382567.33	538053.43	N 32 3 6.24	W 104 12 37.83
	10089.00	89.04	358.00	9139.75	1482.19	1485.32	742.83	1.72	382662.18	538048.77	N 32 3 7.18	W 104 12 37.89
	10183.00	89.62	357.30	9140.85	1576.12	1579.23	738.98	0.97	382756.09	538044.91	N 32 3 8.11	W 104 12 37.93
	10278.00	90.58	355.50	9140.68	1670.95	1674.04	733.02	2.15	382850.89	538038.95	N 32 3 9.05	W 104 12 38.00
	10372.00	92.72	351.17	9137.98	1764.30	1767.34	722.12	5.14	382944.18	538028.05	N 32 3 9.97	W 104 12 38.12
	10467.00	92.13	346.21	9133.95	1857.42	1860.38	703.51	5.25	383037.21	538009.44	N 32 3 10.89	W 104 12 38.34
	10562.00	90.27	343.02	9131.96	1949.08	1951.94	678.31	3.89	383128.76	537984.25	N 32 3 11.80	W 104 12 38.63
	10656.00	88.42	344.70	9133.04	2039.47	2042.22	652.18	2.66	383219.04	537958.12	N 32 3 12.69	W 104 12 38.93
	10751.00	87.70	348.74	9136.26	2131.95	2134.61	630.38	4.32	383311.41	537936.32	N 32 3 13.60	W 104 12 39.18
	10846.00	87.28	352.42	9140.42	2225.63	2228.22	614.85	3.90	383405.02	537920.79	N 32 3 14.53	W 104 12 39.36
	10940.00	87.90	354.65	9144.37	2318.98	2321.53	604.27	2.46	383498.32	537910.22	N 32 3 15.45	W 104 12 39.49
	11034.00	90.07	357.20	9146.04	2412.74	2415.27	597.60	3.56	383592.05	537903.54	N 32 3 16.38	W 104 12 39.56
	11128.00	89.83	359.28	9146.12	2507.71	2510.22	594.68	2.20	383686.99	537900.62	N 32 3 17.32	W 104 12 39.59
	11223.00	89.28	0.95	9146.85	2601.70	2604.21	594.87	1.87	383780.97	537900.81	N 32 3 18.25	W 104 12 39.59
	11318.00	87.97	2.80	9149.13	2696.60	2699.13	597.97	2.39	383875.88	537903.92	N 32 3 19.19	W 104 12 39.55
	11413.00	86.87	4.94	9153.41	2791.25	2793.81	604.38	2.53	383970.55	537910.32	N 32 3 20.13	W 104 12 39.48
	11507.00	86.73	5.11	9158.65	2884.71	2887.30	612.60	0.23	384064.04	537918.54	N 32 3 21.05	W 104 12 39.38
	11602.00	86.56	5.76	9164.21	2979.08	2981.71	621.58	0.71	384158.44	537927.52	N 32 3 21.99	W 104 12 39.28
	11696.00	86.91	7.31	9169.57	3072.27	3074.95	632.26	1.69	384251.66	537938.20	N 32 3 22.91	W 104 12 39.15
	11791.00	86.56	7.85	9174.98	3166.23	3168.96	644.77	0.68	384345.67	537950.71	N 32 3 23.84	W 104 12 39.00
	11886.00	87.70	6.59	9179.73	3260.31	3263.09	656.70	1.79	384439.79	537962.64	N 32 3 24.77	W 104 12 38.86
	11980.00	89.79	5.76	9181.79	3353.69	3356.51	666.80	2.39	384533.21	537972.74	N 32 3 25.70	W 104 12 38.74
	12075.00	90.00	3.92	9181.97	3448.31	3451.17	674.82	1.95	384627.85	537980.76	N 32 3 26.63	W 104 12 38.65
	12169.00	89.73	6.12	9182.19	3541.91	3544.80	683.04	2.36	384721.48	537988.98	N 32 3 27.56	W 104 12 38.55
	12263.00	90.00	6.51	9182.41	3635.30	3638.23	693.38	0.50	384814.90	537999.32	N 32 3 28.48	W 104 12 38.43
	12358.00	89.83	4.12	9182.55	3729.84	3732.82	702.18	2.52	384909.48	538008.12	N 32 3 29.42	W 104 12 38.33
	12452.00	89.79	5.77	9182.86	3823.45	3826.46	710.29	1.76	385003.11	538016.22	N 32 3 30.35	W 104 12 38.23
	12547.00	89.93	3.88	9183.09	3918.08	3921.12	718.28	1.99	385097.76	538024.21	N 32 3 31.28	W 104 12 38.14
	12641.00	89.48	2.48	9183.58	4011.91	4014.97	723.49	1.56	385191.61	538029.42	N 32 3 32.21	W 104 12 38.08
	12736.00	89.14	1.17	9184.72	4106.84	4109.92	726.51	1.42	385286.54	538032.45	N 32 3 33.15	W 104 12 38.04
	12831.00	89.21	1.64	9185.09	4201.79	4204.88	728.84	0.50				

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 ° ' '')
	15006.00	89.14	359.44	9192.62	6376.24	6379.34	728.35	2.54	387555.76	538034.28	N 32 3 55.61	W 104 12 37.99
	15100.00	87.63	359.06	9195.27	6470.19	6473.29	727.12	1.66	387649.70	538033.05	N 32 3 56.54	W 104 12 38.00
	15195.00	89.55	358.85	9197.60	6565.15	6568.25	725.38	2.03	387744.65	538031.32	N 32 3 57.48	W 104 12 38.02
	15289.00	89.86	0.97	9198.09	6659.14	6662.24	725.24	2.28	387838.63	538031.17	N 32 3 58.41	W 104 12 38.02
	15384.00	89.31	359.42	9198.78	6754.13	6757.23	725.56	1.73	387933.62	538031.49	N 32 3 59.35	W 104 12 38.02
	15479.00	91.13	0.74	9198.41	6849.13	6852.23	725.69	2.37	388028.60	538031.63	N 32 4 0.29	W 104 12 38.01
	15573.00	89.31	359.48	9198.05	6943.12	6946.22	725.87	2.35	388122.58	538031.81	N 32 4 1.22	W 104 12 38.01
	15668.00	90.07	0.94	9198.57	7038.11	7041.21	726.22	1.73	388217.57	538032.15	N 32 4 2.16	W 104 12 38.01
	15762.00	88.80	358.44	9199.49	7132.10	7135.20	725.71	2.98	388311.55	538031.65	N 32 4 3.09	W 104 12 38.01
	15857.00	88.76	0.11	9201.52	7227.07	7230.17	724.51	1.76	388406.51	538030.44	N 32 4 4.03	W 104 12 38.02
	15951.00	90.62	359.77	9202.02	7321.06	7324.16	724.41	2.01	388500.49	538030.35	N 32 4 4.96	W 104 12 38.02
	16046.00	89.48	359.65	9201.94	7416.06	7419.16	723.93	1.21	388595.48	538029.87	N 32 4 5.90	W 104 12 38.03
	16140.00	90.34	0.36	9202.09	7510.06	7513.16	723.94	1.19	388689.47	538029.87	N 32 4 6.83	W 104 12 38.03
	16235.00	89.73	0.31	9202.03	7605.05	7608.15	724.50	0.64	388784.46	538030.43	N 32 4 7.77	W 104 12 38.02
	16330.00	90.14	3.38	9202.14	7699.98	7703.09	727.55	3.26	388879.39	538033.49	N 32 4 8.71	W 104 12 37.98
	16425.00	91.10	3.24	9201.11	7794.79	7797.93	733.04	1.02	388974.22	538038.97	N 32 4 9.65	W 104 12 37.92
	16519.00	90.93	2.15	9199.45	7888.65	7891.81	737.46	1.17	389068.09	538043.39	N 32 4 10.57	W 104 12 37.86
	16614.00	90.69	1.39	9198.10	7983.58	7986.75	740.39	0.84	389163.02	538046.32	N 32 4 11.51	W 104 12 37.83
	16709.00	89.97	1.66	9197.55	8078.53	8081.72	742.92	0.81	389257.98	538048.85	N 32 4 12.45	W 104 12 37.80
	16803.00	91.00	2.38	9196.76	8172.45	8175.65	746.23	1.34	389351.91	538052.16	N 32 4 13.38	W 104 12 37.76
	16899.00	90.03	3.23	9195.90	8268.31	8271.53	750.93	1.34	389447.78	538056.86	N 32 4 14.33	W 104 12 37.70
	16993.00	90.72	0.81	9195.28	8362.23	8365.46	754.24	2.68	389541.70	538060.17	N 32 4 15.26	W 104 12 37.66
	17088.00	91.55	1.61	9193.40	8457.18	8460.42	756.25	1.21	389636.65	538062.18	N 32 4 16.20	W 104 12 37.64
	17182.00	91.31	0.95	9191.05	8551.12	8554.37	758.35	0.75	389730.59	538064.28	N 32 4 17.13	W 104 12 37.61
	17277.00	90.82	0.67	9189.29	8646.08	8649.34	759.69	0.59	389825.55	538065.62	N 32 4 18.07	W 104 12 37.60
	17371.00	90.72	0.20	9188.02	8740.07	8743.33	760.40	0.51	389919.53	538066.33	N 32 4 19.00	W 104 12 37.59
	17466.00	89.31	359.23	9188.00	8835.07	8838.33	759.93	1.80	390014.52	538065.86	N 32 4 19.94	W 104 12 37.59
	17560.00	90.03	0.12	9188.54	8929.06	8932.32	759.40	1.22	390108.51	538065.33	N 32 4 20.87	W 104 12 37.60
	17655.00	90.76	359.74	9187.89	9024.06	9027.32	759.28	0.87	390203.49	538065.21	N 32 4 21.81	W 104 12 37.60
	17749.00	90.10	359.92	9187.18	9118.06	9121.31	759.00	0.73	390297.48	538064.93	N 32 4 22.74	W 104 12 37.60
	17844.00	89.90	359.49	9187.18	9213.05	9216.31	758.51	0.50	390392.47	538064.45	N 32 4 23.68	W 104 12 37.60
	17939.00	91.00	359.87	9186.51	9303.05	9306.31	758.04	1.37	390477.46	538063.97	N 32 4 24.52	W 104 12 37.61
	18034.00	90.72	358.88	9185.09	9393.04	9396.29	757.00	1.08	390572.43	538062.93	N 32 4 25.46	W 104 12 37.62
	18118.00	90.89	359.14	9183.77	9487.02	9490.27	755.38	0.33	390666.40	538061.31	N 32 4 26.39	W 104 12 37.63
	18213.00	90.65	358.70	9182.49	9582.00	9585.24	753.59	0.53	390761.37	538059.52	N 32 4 27.33	W 104 12 37.65
	18308.00	90.69	358.24	9181.38	9676.97	9680.20	751.05	0.49	390856.32	538056.98	N 32 4 28.27	W 104 12 37.68
	18403.00	91.14	358.78	9179.86	9771.93	9775.16	748.58	0.74	390951.26	538054.51	N 32 4 29.21	W 104 12 37.71
	18497.00	90.62	0.24	9178.42	9865.92	9869.14	747.78	1.65	391045.24	538053.71	N 32 4 30.14	W 104 12 37.72
	18592.00	91.24	0.69	9176.88	9960.90	9964.12	748.55	0.81	391140.21	538054.48	N 32 4 31.08	W 104 12 37.71
	18686.00	91.38	1.26	9174.73	10054.85	10058.08	750.15	0.62	391234.16	538056.08	N 32 4 32.01	W 104 12 37.69
	18781.00	91.55	1.83	9172.30	10149.77	10153.02	752.71	0.63	391329.09	538056.64	N 32 4 32.95	W 104 12 37.66
	18875.00	90.96	1.26	9170.24	10243.71	10246.96	755.24	0.87	391423.02	538061.17	N 32 4 33.88	W 104 12 37.63
	18970.00	91.38	0.32	9168.30	10338.67	10341.93	756.55	1.08	391517.98	538062.48	N 32 4 34.82	W 104 12 37.61
	19064.00	91.38	1.08	9166.04	10432.63	10435.89	757.70	0.81	391611.94	538063.63	N 32 4 35.75	W 104 12 37.60
	19159.00	91.86	0.98	9163.35	10527.57	10530.84	759.41	0.52	391706.88	538065.34	N 32 4 36.69	W 104 12 37.57
	19254.00	91.38	1.18	9160.66	10622.50	10625.79	761.20	0.55	391801.82	538067.13	N 32 4 37.63	W 104 12 37.55
	19348.00	91.38	1.38	9158.40	10716.44	10719.73	763.30	0.21	391895.76	538069.23	N 32 4 38.56	W 104 12 37.53
	19442.00	91.41	1.10	9156.11	10810.38	10813.68	765.33	0.30	391989.70	538071.26	N 32 4 39.49	W 104 12 37.50
	19537.00	91.10	0.96	9154.03	10905.34	10908.65	767.04	0.36	392084.65	538072.97	N 32 4 40.43	W 104 12 37.48
	19569.00	91.26	0.79	9153.37	10937.32	10940.64	767.53	0.74	392176.64	538073.46	N 32 4 41.37	W 104 12 37.47
	19632.00	91.58	0.45	9151.81	11000.30	11003.61	768.21	0.74	392270.59	538074.14	N 32 4 42.31	W 104 12 37.47
	19660.00	91.65	0.81	9151.02	11028.28	11031.60	768.51	1.31	392364.51	538074.44	N 32 4 43.25	W 104 12 37.46
	19700.00	91.65	0.81	9149.87	11068.26	11071.58	769.08	0.00	392458.57	538075.01	N 32 4 44.19	W 104 12 37.45

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. 1H 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. 1H MWD to
	1	28.000	422.000	Act Stns	30.000	30.000	A001Ma_MWD	Original Borehole / Chevron HH SO 8 5 FED 003 No. 1H MWD to
	1	422.000	19700.000	Act Stns	30.000	30.000	B001Ma_MWD+HDGM	Original Borehole / Chevron HH SO 8 5 FED 003 No. 1H MWD to

...Chevron HH SO 8 5 FED 003 No. 1H\Original Borehole\Chevron HH SO 8 5 FED 003 No. 1H MWD to 19700ft