

NM OIL CONSERVATION
ARTESIA DISTRICT

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

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☒ AMENDED REPORT

"As-Drilled"

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-44876	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code 321188	⁵ Property Name CB SO 15 22 004	⁶ Well Number 1H
⁷ OGRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.	⁹ Elevation 3006'

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	15	23 SOUTH	28 EAST, N.M.P.M.		336'	NORTH	779'	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
M	22	23 SOUTH	28 EAST, N.M.P.M.		177'	SOUTH	307'	WEST	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 CB SO 15 22 004 NO.1H WELL X= 577,987 Y= 477,174 LAT. 32.311616 N LONG. 104.080901 W NAD 27 X= 619,169 Y= 477,234 LAT. 32.311737 N LONG. 104.081398 W NAD83/2011 ELEVATION +3006' NAVD 88 FINAL TOP TAKE POINT X= 577,552 Y= 477,069 LAT. 32.311329 N LONG. 104.082310 W NAD 27 X= 618,734 Y= 477,128 LAT. 32.311450 N LONG. 104.082807 W NAD83/2011 CORNER COORDINATES TABLE (NAD 27) A - Y=477496.90, X=577205.98 B - Y=477585.85, X=582543.98 C - Y=472181.86, X=577232.84 D - Y=472266.72, X=582546.90 E - Y=466858.95, X=577288.92 F - Y=467012.61, X=582560.30 FINAL BOTTOM TAKE POINT X= 577,588 Y= 467,203 LAT. 32.284209 N LONG. 104.082269 W NAD 27 X= 618,770 Y= 467,263 LAT. 32.284330 N LONG. 104.082765 W NAD83/2011 ACTUAL BOTTOM HOLE LOCATION X= 577,594 Y= 467,045 LAT. 32.283773 N LONG. 104.082251 W NAD 27 X= 618,776 Y= 467,104 LAT. 32.283894 N LONG. 104.082747 W NAD83/2011		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. 4/16/2019 Date Laura Becerra Printed Name LBecerra@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. 03/21/2018 Date of Survey Signature and Seal of Professional Surveyor: STEVEN M. COLEMAN NEW MEXICO 22921 PROFESSIONAL SURVEYOR Certificate Number 03/08/2019
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RD 10-25-19

Chevron CB SO 15 22 004 1H MWD 0' to 19668' Survey Geodetic Report



(Def Survey)

Report Date: November 08, 2018 - 08:46 AM
 Client: Chevron
 Field: NM Eddy County (NAD 27)
 Structure / Slot: Chevron CB SO 15 22 004 No. 1H / New Slot
 Well: CB SO 15 22 004 1H
 Borehole: CB SO 15 22 004 1H
 UWI / API#: Unknown / Unknown
 Survey Name: Chevron CB SO 15 22 004 1H MWD 0' to 19668'
 Survey Date: September 01, 2018
 Tort / AHD / DDI / ERD Ratio: 288.418' / 10977.482 ft / 6.814' / 1.149
 Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 18' 41.81476", W 104° 4' 51.24347"
 Location Grid N/E Y/X: N 477174.000 RUS, E 577987.000 RUS
 CRS Grid Convergence Angle: 0.1349°
 Grid Scale Factor: 0.99991606
 Version / Patch: 2.10.740.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 179.550° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB=28ft
 TVD Reference Elevation: 3034.000 ft above MSL
 Seabed / Ground Elevation: 3006.000 ft above MSL
 Magnetic Declination: 7.218°
 Total Gravity Field Strength: 998.4785mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 47985.323 nT
 Magnetic Dip Angle: 60.080°
 Declination Date: September 01, 2018
 Magnetic Declination Model: HDGM 2018
 North Reference: Grid North
 Grid Convergence Used: 0.1349°
 Total Corr Mag North->Grid North: 7.0835°
 Local Coord Referenced To: Well Head

NM OIL CONSERVATION
 ARTESIA DISTRICT

OCT 04 2019

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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 Location	0.00	0.00	301.68	0.00	0.00	0.00	0.00	N/A	477174.00	577987.00	N 32 18 41.81 W 104	4 51.24
Adjusted KB	28.00	0.00	0.00	28.00	0.00	0.00	0.00	0.00	477174.00	577987.00	N 32 18 41.81 W 104	4 51.24
Begin SLB	235.00	2.11	116.54	234.95	1.73	-1.70	3.41	1.02	477172.30	577990.41	N 32 18 41.80 W 104	4 51.20
MWD Surveys												
	322.00	2.55	136.23	321.88	3.86	-3.82	6.18	1.04	477170.18	577993.18	N 32 18 41.78 W 104	4 51.17
	412.00	2.11	206.37	411.82	6.80	-6.75	6.83	3.00	477167.25	577993.83	N 32 18 41.75 W 104	4 51.16
	487.00	1.85	211.14	486.78	9.06	-9.02	5.59	0.41	477164.98	577992.59	N 32 18 41.73 W 104	4 51.18
	594.00	1.24	189.66	593.74	11.67	-11.64	4.50	0.78	477162.36	577991.50	N 32 18 41.70 W 104	4 51.19
	687.00	1.57	256.70	686.72	12.95	-12.92	3.09	1.69	477161.08	577990.09	N 32 18 41.69 W 104	4 51.21
	779.00	3.20	284.89	778.64	12.55	-12.55	-0.61	2.13	477161.45	577986.39	N 32 18 41.69 W 104	4 51.26
	875.00	4.67	299.17	874.41	9.91	-9.96	-6.62	1.83	477164.04	577980.38	N 32 18 41.72 W 104	4 51.32
	965.00	6.41	303.77	963.99	5.27	-5.38	-13.99	1.99	477168.62	577973.01	N 32 18 41.76 W 104	4 51.41
	1060.00	7.72	304.59	1058.26	-1.37	1.19	-23.65	1.38	477175.19	577963.35	N 32 18 41.83 W 104	4 51.52
	1156.00	9.47	303.81	1153.18	-9.52	9.24	-35.52	1.83	477183.24	577951.48	N 32 18 41.91 W 104	4 51.66
	1252.00	9.63	304.64	1247.85	-18.58	18.20	-48.69	0.22	477192.20	577938.31	N 32 18 42.00 W 104	4 51.81
	1347.00	8.64	306.07	1341.65	-27.40	26.92	-61.00	1.07	477200.92	577926.01	N 32 18 42.08 W 104	4 51.95
	1443.00	9.33	302.68	1436.47	-35.94	35.37	-73.38	0.91	477209.36	577913.63	N 32 18 42.17 W 104	4 52.10
	1539.00	8.68	304.84	1531.29	-44.38	43.71	-85.87	0.76	477217.70	577901.13	N 32 18 42.25 W 104	4 52.24
	1633.00	9.01	306.32	1624.17	-52.88	52.12	-97.62	0.43	477226.12	577889.38	N 32 18 42.33 W 104	4 52.38
	1729.00	8.07	307.39	1719.10	-61.52	60.66	-109.04	0.99	477234.66	577877.97	N 32 18 42.42 W 104	4 52.51
	1824.00	7.52	311.53	1813.22	-69.77	68.83	-118.99	0.83	477242.83	577868.02	N 32 18 42.50 W 104	4 52.63
	1920.00	8.54	308.03	1908.28	-78.40	77.39	-129.31	1.18	477251.38	577857.71	N 32 18 42.58 W 104	4 52.75
	2015.00	9.95	304.94	2002.05	-87.55	86.44	-141.59	1.57	477260.43	577845.42	N 32 18 42.67 W 104	4 52.89
	2111.00	8.73	305.61	2096.77	-96.64	95.43	-154.31	1.28	477269.42	577832.70	N 32 18 42.76 W 104	4 53.04
	2207.00	7.92	306.42	2191.76	-104.90	103.60	-165.56	0.85	477277.59	577821.46	N 32 18 42.84 W 104	4 53.17
	2302.00	9.09	302.19	2285.71	-112.87	111.48	-177.18	1.40	477285.47	577809.84	N 32 18 42.92 W 104	4 53.30
	2398.00	10.80	300.22	2380.27	-121.55	120.05	-191.37	1.82	477294.04	577795.65	N 32 18 43.01 W 104	4 53.47
	2493.00	10.62	301.01	2473.61	-130.66	129.04	-206.56	0.24	477303.03	577780.46	N 32 18 43.10 W 104	4 53.65
	2589.00	9.21	301.34	2568.18	-139.32	137.59	-220.70	1.47	477311.58	577766.31	N 32 18 43.18 W 104	4 53.81
	2684.00	8.66	301.77	2662.02	-147.14	145.31	-233.28	0.58	477319.30	577753.74	N 32 18 43.26 W 104	4 53.96
	2780.00	9.41	302.27	2756.83	-155.24	153.31	-246.06	0.79	477327.30	577740.96	N 32 18 43.34 W 104	4 54.11
	2875.00	9.94	303.80	2850.48	-164.05	162.02	-259.44	0.62	477336.00	577727.58	N 32 18 43.42 W 104	4 54.26
	2971.00	9.61	303.68	2945.09	-173.21	171.07	-272.99	0.34	477345.06	577714.03	N 32 18 43.51 W 104	4 54.42
	3066.00	9.39	303.60	3038.78	-182.00	179.76	-286.05	0.23	477353.74	577700.98	N 32 18 43.60 W 104	4 54.57
	3162.00	8.88	303.36	3133.57	-190.51	188.16	-298.76	0.53	477362.15	577688.27	N 32 18 43.68 W 104	4 54.72
	3258.00	9.64	299.50	3228.32	-198.64	196.20	-311.94	1.02	477370.18	577675.08	N 32 18 43.76 W 104	4 54.87
	3353.00	9.75	296.37	3321.96	-206.24	203.69	-326.07	0.57	477377.67	577660.96	N 32 18 43.84 W 104	4 55.04
	3449.00	8.89	297.18	3416.69	-213.35	210.69	-339.95	0.91	477384.67	577647.07	N 32 18 43.91 W 104	4 55.20
	3546.00	9.62	299.83	3512.43	-220.91	218.14	-353.65	0.87	477392.12	577633.38	N 32 18 43.98 W 104	4 55.36
	3640.00	10.01	302.08	3605.05	-229.27	226.39	-367.39	0.58	477400.37	577619.64	N 32 18 44.06 W 104	4 55.52
	3735.00	9.82	302.54	3698.63	-238.12	235.13	-381.21	0.22	477409.11	577605.82	N 32 18 44.15 W 104	4 55.68
	3831.00	9.30	303.98	3793.30	-246.96	243.87	-394.55	0.60	477417.85	577592.49	N 32 18 44.24 W 104	4 55.83
	3926.00	9.18	302.74	3887.07	-255.45	252.26	-407.29	0.24	477426.24	577579.75	N 32 18 44.32 W 104	4 55.98
	4022.00	8.88	302.74	3981.88	-263.70	260.41	-419.96	0.31	477434.38	577567.07	N 32 18 44.40 W 104	4 56.13
	4117.00	7.62	302.72	4075.89	-271.16	267.78	-431.43	1.33	477441.75	577555.61	N 32 18 44.47 W 104	4 56.26
	4213.00	7.29	303.18	4171.08	-278.01	274.55	-441.88	0.35	477448.53	577545.16	N 32 18 44.54 W 104	4 56.38
	4308.00	5.26	299.09	4265.51	-283.50	279.97	-450.73	2.19	477453.94	577536.31	N 32 18 44.60 W 104	4 56.49
	4404.00	2.86	294.84	4361.26	-286.69	283.11	-456.75	2.52	477457.09	577530.29	N 32 18 44.63 W 104	4 56.56
	4499.00	1.03	250.08	4456.21	-287.42	283.82	-459.71	2.37	477457.79	577527.33	N 32 18 44.63 W 104	4 56.59
	4595.00	1.08	176.48	4552.19	-286.23	282.62	-460.46	1.32	477456.60	577526.58	N 32 18 44.62 W 104	4 56.60
	4690.00	1.16	161.33	4647.18	-284.42	280.82	-460.10	0.32	477454.79	577526.94	N 32 18 44.60 W 104	4 56.60
	4786.00	0.71	176.14	4743.16	-282.90	279.30	-459.75	0.53	477453.28	577527.29	N 32 18 44.59 W 104	4 56.59
	4882.00	0.60	177.78	4839.16	-281.81	278.21	-459.69	0.12	477452.18	577527.35	N 32 18 44.58 W 104	4 56.59
	4977.00	0.52	169.31	4934.15	-280.89	277.29	-459.59	0.12	477451.26	577527.45	N 32 18 44.57 W 104	4 56.59
	5072.00	0.48	159.71	5029.15	-280.09	276.49	-459.37	0.10	477450.47	577527.67	N 32 18 44.56 W 104	4 56.58
	5168.00	0.40	152.99	5125.15	-279.41	275.81	-459.08	0.10	477449.79	577527.96	N 32 18 44.55 W 104	4 56.58
	5264.00	0.34	154.41	5221.14	-278.85	275.26	-458.80	0.06	477449.23	577528.24	N 32 18 44.54 W 104	4 56.58
	5359.00	0.30	143.82	5316.14	-278.40	274.80	-458.54	0.07	477448.78	577528.50	N 32 18 44.54 W 104	4 56.58
	5455.00	0.36	145.65	5412.14	-277.94	274.35	-458.22	0.06	477448.33	577528.82	N 32 18 44.54 W 104	4 56.57
	5550.00	0.11	166.09	5507.14	-277.61	274.02	-458.03	0.27	477447.99	577529.01	N 32 18 44.54 W 104	4 56.57
	5646.00	0.25	130.38	5603.14	-277.38	273.79	-457.85	0.18	477447.77	577529.19	N 32 18 44.53 W 104	4 56.57
	5741.00	0.08	81.49	5698.14	-277.25	273.67	-457.62	0.22	477447.64	577529.42	N 32 18 44.53 W 104	4 56.57
	5837.00	0.06	184.85	5794.14	-277.21	273.63	-457.56	0.12	477447.60	577529.48	N 32 18 44.53 W 104	4 56.57
	5932.00	0.25	107.61	5889.14	-277.10	273.51	-457.37	0.26	477447.49	577529.67	N 32 18 44.53 W 104	4 56.57
	6028.00	0.28	117.91	5985.14	-276.92	273.34	-456.96	0.06	477447.32	577529.88	N 32 18 44.53 W 104	4 56.56
	6123.00	0.08	219.78	6080.14	-276.76	273.18	-456.80	0.32	477447.16	577530.24	N 32 18 44.53 W 104	4 56.56
	6219.00	0.13	82.98	6176.14	-276.72	273.14	-456.73	0.20	477447.12	577530.31	N 32 18 44.53 W 104	4 56.56
	6315.00	0.17	122.74	6272.14	-276.66	273.08	-456.50	0.11	477447.06	577530.54	N 32 18 44.53 W 104	4 56.55
	6410.00	0.13	66.68	6367.14	-276.62	273.05	-456.29	0.15	477447.02	577530.75	N 32 18 44.53 W 104	4 56.55
	6506.00	0.38	26.17	6463.14	-276.95	273.37	-456.05	0.31	477447.35	577530.99	N 32 18 44.53 W 104	4 56.55
	6601.00	0.30	5.40	6558.13	-277.48	273.91	-455.88	0.15	477447.88	577531.16	N 32 18 44.54 W 104	4 56.55
	6696.00	0.30	290.67	6653.13	-277.81	274.24	-456.09	0.38	477448.22	577530.95	N 32 18 44.54 W 104	4 56.55
	6792.00	0.29	61.88	6749.13	-278.02	274.44	-456.11	0.56	477448.42	577530.93	N 32 18 44.54 W 104	4 56.55
	6887.00	0.06	355.05	6844.13	-278.18	274.61	-455.91	0.29	477448.58	577531.13	N 32 18 44.54 W 104	4 56.55
	6983.00	0.13	310.86	6940								

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 ° ' ")
	7365.00	0.56	249.45	7322.12	-277.68	274.09	-457.89	0.08	477448.06	577529.15	N 32 18 44.54 W 104	4 56.57
	7461.00	0.50	198.73	7418.12	-277.12	273.53	-458.46	0.47	477447.51	577528.58	N 32 18 44.53 W 104	4 56.58
	7557.00	0.78	158.46	7514.11	-276.12	272.53	-458.35	0.53	477446.50	577528.69	N 32 18 44.52 W 104	4 56.58
	7652.00	0.68	159.05	7609.11	-274.99	271.40	-457.91	0.11	477445.37	577529.13	N 32 18 44.51 W 104	4 56.57
	7748.00	0.29	208.48	7705.10	-274.24	270.65	-457.82	0.56	477444.63	577529.22	N 32 18 44.50 W 104	4 56.57
	7843.00	0.28	220.78	7800.10	-273.85	270.26	-458.09	0.07	477444.24	577528.95	N 32 18 44.50 W 104	4 56.57
	7938.00	0.33	173.64	7896.10	-273.40	269.81	-458.21	0.26	477443.79	577528.83	N 32 18 44.50 W 104	4 56.58
	8035.00	0.28	151.87	7992.10	-272.92	268.88	-458.07	0.13	477443.31	577528.97	N 32 18 44.49 W 104	4 56.57
	8130.00	0.32	160.62	8087.10	-272.45	268.27	-457.83	0.06	477442.85	577529.16	N 32 18 44.49 W 104	4 56.57
	8226.00	0.13	154.08	8183.10	-272.11	268.52	-457.74	0.20	477442.50	577529.30	N 32 18 44.48 W 104	4 56.57
	8321.00	0.25	222.17	8278.10	-271.86	268.27	-457.83	0.25	477442.25	577529.21	N 32 18 44.48 W 104	4 56.57
	8417.00	0.32	233.29	8374.10	-271.55	267.96	-458.19	0.09	477441.94	577528.85	N 32 18 44.47 W 104	4 56.57
	8513.00	0.43	233.57	8470.09	-271.18	267.58	-458.69	0.11	477441.56	577528.35	N 32 18 44.47 W 104	4 56.58
	8608.00	0.45	220.13	8565.09	-270.69	267.09	-459.22	0.11	477441.06	577527.82	N 32 18 44.47 W 104	4 56.59
	8704.00	0.61	176.29	8661.09	-269.89	266.29	-459.43	0.44	477440.27	577527.61	N 32 18 44.46 W 104	4 56.59
	8800.00	0.85	170.31	8757.08	-268.68	265.08	-459.27	0.26	477439.05	577527.77	N 32 18 44.45 W 104	4 56.59
	8837.00	0.89	184.85	8794.07	-268.12	264.52	-459.25	0.60	477438.50	577527.79	N 32 18 44.44 W 104	4 56.59
	9010.00	4.55	159.50	8966.85	-260.33	256.75	-456.96	2.18	477430.73	577530.08	N 32 18 44.37 W 104	4 56.56
	9106.00	16.76	168.55	9061.02	-243.10	239.55	-452.87	12.80	477430.73	577530.08	N 32 18 44.37 W 104	4 56.56
	9202.00	27.54	176.88	9149.83	-207.23	203.71	-448.90	11.67	477431.53	577534.17	N 32 18 44.20 W 104	4 56.51
	9298.00	34.00	174.74	9232.27	-158.26	154.77	-445.22	6.82	477377.69	577538.14	N 32 18 43.84 W 104	4 56.47
	9394.00	39.99	176.35	9308.92	-100.66	97.20	-440.80	6.32	477328.76	577541.81	N 32 18 43.36 W 104	4 56.43
	9489.00	47.98	179.72	9377.22	-34.78	31.34	-438.68	8.76	477271.19	577546.24	N 32 18 42.79 W 104	4 56.38
FTP Cross	9532.00	52.93	179.07	9404.59	-1.63	-1.81	-438.32	11.57	477172.19	577548.72	N 32 18 42.14 W 104	4 56.35
	9565.00	59.03	178.37	9434.23	42.27	-45.71	-437.33	11.57	477128.30	577549.71	N 32 18 41.81 W 104	4 56.35
	9681.00	70.62	177.57	9475.00	128.97	-132.38	-434.23	12.10	477041.63	577552.81	N 32 18 41.37 W 104	4 56.31
	9776.00	79.49	177.53	9499.48	220.61	-223.99	-430.31	9.34	476950.03	577556.73	N 32 18 39.61 W 104	4 56.26
	9872.00	86.18	180.83	9511.45	315.79	-319.17	-428.96	7.76	476854.86	577558.07	N 32 18 38.67 W 104	4 56.25
	9967.00	92.44	181.32	9512.59	410.70	-414.10	-430.74	6.61	476759.94	577558.29	N 32 18 37.73 W 104	4 56.27
	10108.00	87.31	180.03	9512.90	551.62	-555.04	-432.41	3.75	476619.01	577554.63	N 32 18 36.33 W 104	4 56.30
	10159.00	85.97	178.09	9515.89	602.53	-605.94	-431.57	4.62	476568.11	577555.47	N 32 18 35.83 W 104	4 56.29
	10254.00	88.45	179.36	9520.51	697.40	-700.79	-429.46	2.93	476473.27	577557.58	N 32 18 34.89 W 104	4 56.27
	10350.00	87.97	178.49	9523.51	793.34	-796.73	-427.66	1.03	476377.34	577559.38	N 32 18 33.94 W 104	4 56.25
	10446.00	89.55	177.67	9525.59	889.29	-892.65	-424.45	1.85	476281.43	577562.59	N 32 18 32.99 W 104	4 56.21
	10541.00	90.86	177.39	9525.25	984.22	-987.56	-420.35	1.41	476186.53	577566.68	N 32 18 32.05 W 104	4 56.17
	10637.00	91.27	178.65	9523.46	1080.17	-1083.48	-417.03	1.38	476090.61	577570.00	N 32 18 31.10 W 104	4 56.13
	10828.00	89.31	183.15	9522.50	1271.06	-1274.40	-420.03	2.57	475899.71	577567.00	N 32 18 29.21 W 104	4 56.17
	10924.00	89.21	182.54	9523.74	1366.89	-1370.27	-424.80	0.64	475803.85	577562.24	N 32 18 28.27 W 104	4 56.23
	10955.00	89.00	182.27	9524.22	1397.85	-1401.24	-426.10	1.10	475772.88	577560.94	N 32 18 27.96 W 104	4 56.25
	11052.00	88.93	182.67	9525.97	1494.71	-1498.13	-430.28	0.42	475676.00	577556.76	N 32 18 27.00 W 104	4 56.30
	11148.00	89.90	183.22	9526.95	1590.53	-1594.00	-435.21	1.16	475580.14	577551.83	N 32 18 26.05 W 104	4 56.36
	11244.00	89.97	182.70	9527.06	1686.36	-1689.87	-440.17	0.55	475484.28	577546.87	N 32 18 25.10 W 104	4 56.42
	11339.00	89.83	181.16	9527.23	1781.28	-1784.81	-443.37	1.63	475389.34	577543.67	N 32 18 24.16 W 104	4 56.46
	11435.00	90.14	180.80	9527.25	1877.25	-1880.80	-445.01	0.49	475293.36	577542.03	N 32 18 23.21 W 104	4 56.48
	11531.00	90.17	181.66	9526.99	1973.20	-1976.77	-447.07	0.90	475197.40	577539.97	N 32 18 22.26 W 104	4 56.51
	11626.00	89.38	179.65	9527.37	2068.18	-2071.76	-448.16	2.27	475102.42	577538.88	N 32 18 21.32 W 104	4 56.52
	11722.00	89.48	178.59	9528.32	2164.17	-2167.74	-446.68	1.11	475006.44	577540.36	N 32 18 20.37 W 104	4 56.51
	11817.00	89.79	176.94	9528.93	2259.12	-2262.67	-442.98	1.77	474911.53	577544.06	N 32 18 19.44 W 104	4 56.47
	11913.00	89.48	177.75	9529.54	2355.04	-2358.56	-438.53	0.90	474815.53	577548.51	N 32 18 18.49 W 104	4 56.42
	12009.00	87.73	176.03	9531.87	2450.91	-2454.38	-433.33	2.56	474719.83	577553.71	N 32 18 17.54 W 104	4 56.36
	12104.00	89.17	178.55	9534.44	2545.79	-2549.23	-428.84	3.05	474624.99	577558.20	N 32 18 16.60 W 104	4 56.31
	12200.00	90.31	180.29	9534.88	2641.78	-2645.22	-427.86	2.17	474529.01	577559.17	N 32 18 15.65 W 104	4 56.30
	12296.00	89.83	179.95	9534.76	2737.77	-2741.22	-428.07	0.61	474433.01	577558.97	N 32 18 14.70 W 104	4 56.31
	12392.00	88.49	175.66	9536.17	2833.70	-2837.12	-424.39	4.68	474337.14	577562.65	N 32 18 13.75 W 104	4 56.27
	12487.00	88.66	175.65	9538.53	2928.45	-2931.81	-417.20	0.18	474242.44	577569.84	N 32 18 12.81 W 104	4 56.18
	12583.00	89.14	178.09	9540.38	3024.32	-3027.65	-411.96	2.59	474146.62	577575.08	N 32 18 11.86 W 104	4 56.13
	12679.00	89.86	180.16	9541.21	3120.30	-3123.62	-410.49	2.28	474050.64	577576.55	N 32 18 10.92 W 104	4 56.11
	12774.00	88.04	180.78	9542.96	3215.27	-3218.60	-411.27	2.02	473955.68	577575.77	N 32 18 9.98 W 104	4 56.12
	12866.00	89.86	184.07	9546.47	3406.96	-3410.36	-419.39	1.96	473763.93	577567.64	N 32 18 8.08 W 104	4 56.22
	13061.00	89.31	182.12	9547.16	3501.77	-3505.22	-424.52	2.13	473669.09	577562.52	N 32 18 7.14 W 104	4 56.29
	13157.00	89.24	179.86	9548.38	3597.73	-3601.19	-426.18	2.36	473573.12	577560.86	N 32 18 6.19 W 104	4 56.31
	13253.00	90.14	181.27	9548.90	3693.71	-3697.18	-427.13	1.74	473477.14	577559.91	N 32 18 5.24 W 104	4 56.32
	13348.00	92.34	182.23	9548.84	3788.61	-3792.11	-430.03	2.53	473382.22	577557.01	N 32 18 4.30 W 104	4 56.36
	13444.00	89.97	181.96	9544.91	3884.49	-3888.01	-433.53	2.48	473286.32	577553.50	N 32 18 3.35 W 104	4 56.40
	13539.00	90.00	182.50	9544.93	3979.39	-3982.94	-437.23	0.57	473191.40	577549.81	N 32 18 2.41 W 104	4 56.45
	13635.00	90.41	180.71	9544.59	4075.32	-4078.90	-439.92	1.91	473095.45	577547.12	N 32 18 1.46 W 104	4 56.48
	13730.00	90.21	180.13	9544.07	4170.31	-4173.90	-440.62	0.65	473000.46	577546.42	N 32 18 0.52 W 104	4 56.49
	13826.00	89.04	179.44	9544.70	4266.30	-4269.89	-440.25	1.41	472904.48	577546.78	N 32 17 59.57 W 104	4 56.49
	13922.00	90.41	180.77	9545.16	4362.29	-4365.88	-440.43	1.99	472808.49	577546.61	N 32 17 58.62 W 104	4 56.49
	14017.00	89.14	180.60	9545.54	4457.27	-4460.88	-441.57	1.35	472713.51	577545.47	N 32 17 57.68 W 104	4 56.51
	14113.00	89.59	180.53	9546.60	4553.25	-4556.86	-442.51	0.47	472617.53	577544.52	N 32 17 56.73 W 104	4 56.52
	14209.00	90.48	178.03	9546.54	4649.24	-4652.85	-441.31	2.76	472521.55	577545.73	N 32 17 55.78 W 104	4 56.51
	14305.00	89.11	179.87	9546.88	4745.23	-4748.83	-439.55	2.39	472425.58	577547.49	N 32 17 54.83 W 104	4 56.49
	14400.00	89.07	180.23	9546.39	4840.21	-4843.81	-439.63	0.38	472330.60	577547.41	N 32 17 53.89 W 104	4 56.50
	14496.00	89.76	178.31	9549.37	4936.20	-4939.79	-438.41	2.13	472234.63	577548.63	N 32 17 52.94 W 104	4 56.49
	14592.00	89.55	178.70	9549.95	5032.18	-5035.76	-435.90	0.46	472138.67	577551.13	N 32 17 51.99 W 104	4 56.46
	14688.00	89.59	179.52	9550.67								

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 ° ' ")
	18602.00	91.34	180.31	9539.69	9041.20	-9044.64	-402.66	0.68	468130.13	577584.37	N 32 17 12.32 W 104	4 56.18
	18768.00	90.79	178.88	9536.61	9207.17	-9210.61	-401.49	0.92	467964.19	577585.54	N 32 17 10.68 W 104	4 56.17
	18864.00	90.21	179.74	9535.77	9303.16	-9306.59	-400.33	1.08	467868.21	577586.70	N 32 17 9.73 W 104	4 56.16
	18959.00	90.00	179.25	9535.59	9398.16	-9401.59	-399.50	0.56	467773.22	577587.54	N 32 17 8.79 W 104	4 56.15
	19055.00	89.90	180.66	9535.68	9494.16	-9497.59	-399.42	1.47	467677.23	577587.61	N 32 17 7.84 W 104	4 56.16
	19246.00	89.62	181.30	9536.48	9685.09	-9688.56	-402.69	0.37	467486.28	577584.35	N 32 17 5.95 W 104	4 56.20
	19341.00	89.66	179.55	9537.08	9780.08	-9783.55	-403.39	1.84	467391.29	577583.64	N 32 17 5.01 W 104	4 56.21
LTP Cross	19532.50	89.62	178.12	9538.28	9971.55	-9975.00	-399.51	0.75	467199.86	577587.53	N 32 17 3.12 W 104	4 56.17
	19533.00	89.62	178.12	9538.28	9972.05	-9975.50	-399.49	0.75	467199.36	577587.55	N 32 17 3.11 W 104	4 56.17
Last SLB MWD Survey	19628.00	90.34	177.78	9538.32	10067.02	-10070.44	-396.09	0.84	467104.43	577590.94	N 32 17 2.17 W 104	4 56.13
Projection to Bit	19668.00	90.34	177.78	9538.08	10107.00	-10110.41	-394.54	0.00	467064.46	577592.49	N 32 17 1.78 W 104	4 56.12

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	B001Ma_MWD+HDGM-Depth Only	CB SO 15 22 004 1H / Chevron CB SO 15 22 004 1H MWD 0' to 19668'
	1	28.000	28.000	Act Stns	30.000	30.000	B001Ma_MWD+HDGM-Depth Only	CB SO 15 22 004 1H / Chevron CB SO 15 22 004 1H MWD 0' to 19668'
	1	28.000	19668.000	Act Stns	30.000	30.000	B001Ma_MWD+HDGM	CB SO 15 22 004 1H / Chevron CB SO 15 22 004 1H MWD 0' to 19668'