

Survey File: EMSU308

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Date: 2-10-97

Time: 14:27:25

CHEVRON USA

EMSU 308

LEA, CO. N.M.

PRIDE

SUR: 1980/N & 1980/E G-11-21-3b
 BHL: 887/N & 3206/E C-11-21-3b

All directions referenced to True North

ALL depths ref. to GROUND LEVEL

SURVEYOR: R.HILL, J.MADDUX

30.025-04618

Survey Reference Point : 360.0

Local Grid Offset : 0.0

Drift Correction Method: Constant Rate from initial to final sighting

Survey Computation Method: Minimum Curvature

Target Direction: 312.26

FINAL DATA (INRUN)

Measured Depth (feet)	Course Inclination	Course Direction	Vertical Depth (feet)	Rectangular Coordinates		Vertical Section	Dogleg Severity (per100)
				N/S	E/W		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.00	0.62	158.04	100.00	-0.50	0.20	-0.48	0.62
200.00	0.74	160.94	199.99	-1.61	0.61	-1.53	0.13
300.00	0.82	158.03	299.98	-2.88	1.09	-2.74	0.09
400.00	0.83	166.34	399.97	-4.25	1.53	-3.99	0.12
500.00	0.84	159.51	499.96	-5.65	1.95	-5.25	0.10
600.00	0.83	158.15	599.95	-7.01	2.49	-6.56	0.03
700.00	0.99	162.01	699.94	-8.50	3.02	-7.95	0.18
800.00	0.86	163.18	799.92	-10.04	3.51	-9.35	0.14
900.00	0.87	172.28	899.91	-11.51	3.83	-10.58	0.14
1000.00	0.81	177.02	999.90	-12.97	3.96	-11.65	0.09
1100.00	0.71	179.85	1099.89	-14.30	4.00	-12.58	0.11
1200.00	0.33	181.61	1199.89	-15.21	4.00	-13.19	0.38
1300.00	0.29	142.58	1299.89	-15.70	4.14	-13.62	0.21
1400.00	0.62	88.27	1399.88	-15.89	4.83	-14.26	0.51
1500.00	0.97	52.93	1499.87	-15.36	6.04	-14.80	0.58
1600.00	0.34	170.13	1599.86	-15.14	6.77	-15.19	1.16
1700.00	0.61	120.05	1699.86	-15.70	7.28	-15.95	0.47
1800.00	0.89	14.34	1799.85	-15.22	7.93	-16.10	1.20
1900.00	0.67	88.90	1899.84	-14.46	8.70	-16.16	0.96
2000.00	1.37	120.20	1999.83	-15.05	10.31	-17.75	0.87
2100.00	2.92	113.27	2099.75	-16.65	13.68	-21.32	1.57
2200.00	4.63	89.20	2199.53	-17.61	20.06	-26.69	2.29
2300.00	2.17	101.32	2299.34	-17.92	25.95	-31.26	2.54
2400.00	1.81	111.00	2399.28	-18.86	29.28	-34.35	0.50
2500.00	1.58	100.96	2499.23	-19.69	32.11	-37.01	0.37
2600.00	0.22	313.99	2599.21	-19.81	33.33	-37.99	1.78
2700.00	0.71	299.03	2699.21	-19.38	32.65	-37.20	0.49
2800.00	0.85	328.89	2799.20	-18.45	31.73	-35.89	0.42
2900.00	0.89	330.37	2899.19	-17.14	30.96	-34.44	0.05
3000.00	0.92	318.98	2999.18	-15.86	30.05	-32.91	0.18

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Measured Depth (feet)	Course Inclination	Course Direction	Vertical Depth (feet)	Rectangular Coordinates N/S E/W-		Vertical Section	Dogleg Severity (per100)
3100.00	0.70	311.72	3099.17	-14.84	29.06	-31.49	0.24
3200.00	0.61	289.78	3199.16	-14.26	28.11	-30.39	0.27
3300.00	0.39	286.35	3299.16	-13.98	27.29	-29.60	0.22
3400.00	0.49	276.35	3399.15	-13.84	26.53	-28.94	0.13
3500.00	0.60	295.30	3499.15	-13.57	25.64	-28.10	0.21
3600.00	0.69	305.44	3599.14	-13.00	24.68	-27.01	0.15
3605.00	0.65	291.14	3604.14	-12.97	24.63	-26.95	3.43

* * * N A U T I C A L (V e r s i o n 2 . 0) * * *

WELL: EMSU #308

Target Az: 312
Target TVD 3820

Closure Direction: 312

MD	INC	AZ	TVD	Vert. Section	Coordinates N-S	E-W	Closure	Build Rate	Walk Rate	Tool Face
3605	0.7	291.1	3604.1	-26.9	-13.0	24.6	27.8			
3664	1.2	302.2	3663.1	-26.1	-12.5	23.8	26.9	0.01	0.19	ORT.
3674	2.6	302.2	3673.1	-25.7	-12.4	23.5	26.6	0.14	0.00	ORT.
3685	6.1	302.2	3684.1	-24.9	-11.9	22.8	25.7	0.32	0.00	ORT.
3696	10.6	305.1	3694.9	-23.3	-11.0	21.5	24.1	0.41	0.26	ORT.
3710	16.8	310.1	3708.5	-20.0	-9.0	18.8	20.9	0.44	0.36	H.S.
3727	24.7	310.6	3724.4	-14.0	-5.1	14.2	15.1	0.46	0.03	H.S.
3742	31.5	311.4	3737.6	-6.9	-0.5	8.9	8.9	0.45	0.05	H.S.
3759	38.2	311.5	3751.6	2.8	6.0	1.6	6.2	0.39	0.01	W.W.
3777	42.3	311.3	3765.3	14.4	13.6	-7.1	15.4	0.23	-0.01	W.W.
3789	46.7	312.2	3773.9	22.8	19.2	-13.4	23.4	0.37	0.08	W.W.
3804	52.8	312.9	3783.6	34.3	27.0	-21.8	34.7	0.41	0.05	15R
3821	60.2	312.4	3793.0	48.4	36.6	-32.2	48.8	0.44	-0.03	15L
3836	67.4	311.0	3799.6	61.9	45.5	-42.3	62.1	0.48	-0.09	30L
3850	73.5	310.7	3804.3	75.1	54.2	-52.3	75.3	0.44	-0.02	30L
3870	80.2	308.0	3808.8	94.5	66.5	-67.3	94.6	0.33	-0.14	45L
3885	80.7	306.9	3811.3	109.3	75.5	-79.1	109.3	0.03	-0.07	60L
3898	81.7	306.3	3813.3	122.1	83.2	-89.4	122.1	0.08	-0.05	H.S.
3915	83.0	306.7	3815.5	138.8	93.2	-102.9	138.8	0.08	0.02	H.S.
3930	84.0	307.3	3817.2	153.7	102.2	-114.8	153.7	0.07	0.04	H.S.
3945	85.0	307.6	3818.7	168.6	111.2	-126.7	168.6	0.07	0.02	H.S.
3961	85.8	307.9	3820.0	184.5	121.0	-139.3	184.5	0.05	0.02	H.S.
3981	86.8	307.4	3821.3	204.4	133.2	-155.1	204.4	0.05	-0.03	H.S.
3992	88.4	306.9	3821.7	215.3	139.8	-163.8	215.4	0.15	-0.05	H.S.
4010	94.1	303.7	3821.3	233.2	150.2	-178.5	233.3	0.32	-0.18	50L
4024	96.3	301.8	3820.0	247.0	157.8	-190.3	247.2	0.16	-0.14	50L
4055	96.4	300.5	3816.6	277.2	173.7	-216.6	277.7	0.00	-0.04	75L
4085	96.3	300.6	3813.3	306.4	188.9	-242.3	307.2	-0.00	0.00	ROT.
4100	97.4	301.0	3811.5	321.1	196.5	-255.1	322.0	0.07	0.03	H.S.
4118	98.3	301.1	3809.1	338.6	205.7	-270.4	339.7	0.05	0.01	H.S.
4148	98.9	301.6	3804.6	367.7	221.1	-295.7	369.2	0.02	0.02	ROT.
4180	98.2	302.0	3799.8	398.9	237.8	-322.6	400.8	-0.02	0.01	ROT.
4211	97.2	302.0	3795.7	429.1	254.1	-348.7	431.4	-0.03	0.00	ROT.
4242	96.7	302.5	3791.9	459.4	270.5	-374.7	462.1	-0.02	0.02	ROT.
4274	97.3	302.6	3788.0	490.8	287.6	-401.4	493.8	0.02	0.00	H.S.
4306	96.8	303.1	3784.1	522.1	304.8	-428.1	525.6	-0.02	0.02	ROT.
4338	97.2	303.5	3780.2	553.5	322.3	-454.7	557.3	0.01	0.01	H.S.
4401	96.2	304.4	3772.8	615.5	357.2	-506.6	619.8	-0.02	0.01	ROT.
4464	97.4	307.1	3765.4	677.7	393.7	-557.3	682.4	0.02	0.04	45R
4496	97.8	308.3	3761.1	709.3	413.1	-582.4	714.1	0.01	0.04	45R
4527	98.2	310.9	3756.8	740.0	432.7	-606.1	744.7	0.01	0.08	45R
4568	97.4	313.1	3751.3	780.6	459.9	-636.3	785.1	-0.02	0.05	ROT.
4590	97.1	315.0	3748.5	802.4	475.1	-652.0	806.7	-0.01	0.09	90R
4621	96.4	315.8	3744.8	833.1	497.0	-673.6	837.1	-0.02	0.03	ROT.
4653	95.7	316.5	3741.5	864.9	519.9	-695.6	868.5	-0.02	0.02	ROT.

*** NAUTICAL (Version 2.0) ***

WELL: EMSU #308

Target Az: 312
Target TVD 3820

Closure Direction: 312

MD	INC	AZ	TVD	Vert. Section	Coordinates N-S	E-W	Closure	Build Rate	Walk Rate	Tool Face
4683	96.1	317.9	3738.4	894.6	541.8	-715.9	897.8	0.01	0.05	60R
4716	97.0	319.0	3734.6	927.2	566.4	-737.7	930.0	0.03	0.03	60R
4780	98.9	319.3	3725.8	990.0	614.3	-779.1	992.2	0.03	0.00	60R
4843	100.2	319.5	3715.3	1051.7	661.5	-819.5	1053.2	0.02	0.00	45R
4874	99.8	319.5	3709.9	1081.9	684.7	-839.4	1083.2	-0.01	0.00	ROT.
4905	98.6	320.0	3705.0	1112.2	708.1	-859.1	1113.3	-0.04	0.02	150R
4968	93.8	318.7	3698.2	1174.4	755.6	-899.9	1175.1	-0.08	-0.02	160L
5032	96.0	317.8	3692.7	1237.7	803.1	-942.4	1238.2	0.03	-0.01	ROT.
5095	95.5	316.9	3686.4	1300.2	849.2	-984.9	1300.5	-0.01	-0.01	ROT.
5157	95.1	316.9	3680.7	1361.7	894.3	-1027.1	1361.9	-0.01	0.00	ROT.
5220	95.8	315.9	3674.7	1424.2	939.7	-1070.3	1424.3	0.01	-0.02	ROT.
5283	96.1	315.3	3668.1	1486.7	984.5	-1114.1	1486.8	0.00	-0.01	ROT.
5344	96.4	314.0	3661.5	1547.3	1027.1	-1157.3	1547.3	0.00	-0.02	ROT.
5408	97.0	313.4	3654.0	1610.8	1071.0	-1203.2	1610.9	0.01	-0.01	ROT.
5440	97.0	313.4	3650.1	1642.6	1092.9	-1226.3	1642.6	0.00	0.00	ROT.