

Results of Directional Survey

API number:	30-025-40706		
OGRID:		Operator:	CHEVRON U S A INC
		Property:	CROSS BONES 2-29 # 1H

surface	ULSTR:	M	29	T 18S	R 32E
				560 FSL	660 FWL

BH Loc	ULSTR:	P	29	T 18S	R 32E
13266	MD	9387.8	TVD	368 FSL	442 FEL
					4838 FWL

Top Perf/OH	ULSTR:	M	29	T 18S	R 32E
9655	MD	9310.3	TVD	548 FSL	1234 FWL

Bot Perf/OH	ULSTR:	P	29	T 18S	R 32E
13151	MD	9364.7	TVD	370 FSL	556 FEL
					4724 FWL

	MD	N/S	E/W	VD
	9630	-11.47	549.42	9306.73
TOP PERFS/OH	9655	-12.09	574.15	9310.29
	9662	-12.26	581.08	9311.29
	13108	-189.75	4020.54	9363.55
BOT PERFS/OH	13151	-190.50	4063.52	9364.70
	13202	-191.39	4114.49	9366.06

NEXT TO LAST	13202	-191.39	4114.49	9366.06
LAST READING	13266	-192.15	4178.46	9387.83
TD	13266	-192.15	4178.46	9387.83

Surface Location	560	FS	660	FW
Projected BHL	368	FS	4838	FW
Location of				
Top Perfs/OH	548	FS	1234	FW
Bottom Perfs/OH	370	FS	4724	FW

SUMMARY of Subsurface Locations

Surface Location	M-29-18S-32E	560	FS	660	FW	Vert. Depth
Top Perfs/OH	M-29-18S-32E	548	FS	1234	FW	9310.29
Bottom Perfs/OH	P-29-18S-32E	370	FS	4724	FW	9364.70
Projected TD	P-29-18S-32E	368	FS	4838	FW	9387.83

Oilfield Services, Central U.S. Land

HOBBS OCD

Schlumberger

Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

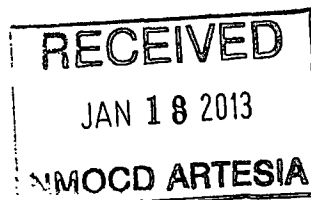
Fax: (405) 682-3937

FEB 06 2013

RECEIVED

January 9, 2013

Chevron U.S.A. Inc.
Houston, TX 77252



Sec 29 T18S R32E LEA NM
N 32.713 W 103.794

Re:

CLIENT: Chevron U.S.A. Inc.
WELL: Cross Bones 2 29 #1H ST01
FIELD: Lusk, Bone Spring North
RIG: H&P 227
COUNTY: Lea New Mexico
API NO: 30-025-40706-01
JOB NO: 12MLD0417

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation.

Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Colby Gannon Field Engineer 1	Cross Bones 2 29 #1H ST01 Side Track	8652.00 Ft to 13202.00 Ft	September 26, 2012 to October 8, 2012	SlimPulse

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

Jasem Alharer
Field Service Manager

Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

Fax: (405) 682-3937

Well Reference:

Sec 29 T18S R32E LEA NM

N 32.713 W 103.794

RECEIVED

JAN 18 2013

NMOCD ARTESIA

I, Colby Gannon certify that; I am employed by Drilling & Measurements (formerly Anadrill), a division of Schlumberger Technology Corporation; that I did on the day(s) of September 26, 2012 through October 08, 2012, conduct or supervise the taking of the SlimPulse surveys from a depth of 8652.00 feet to a depth of 13202.00 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 U.S.A. Inc. for the Cross Bones 2 29 #1H ST01 Well (Side Track) API No. 30-025-40706-01 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

Colby Gannon (signature)

Field Engineer 1

Subscribed and Sworn to before me this 9th day of January (month) 2013 (yr)

My Commission expires:

May 26, 2014

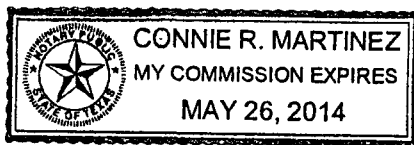
Connie R. Martinez

Notary Public

Keat

(County State)

(signature)



RECEIVED Schlumberger

Attached to
electronic 31100-y



Chevron Cross Bones 2 29 #1H Final Survey Report (Non-Def Survey)

Report Date: October 10, 2012 - 11:51 PM
Client: Chevron
Field: Lusk, Bone Spring North
Structure / Slot: Chevron Cross Bones 2 29 1H / Chevron Cross Bones 2 29 1H
Well: Chevron Cross Bones 2 29 1H
Borehole: ST01
UWI / API#: 30-025-40706-01
Survey Name: Chevron Cross Bones 2 29 #1H Final Survey Report
Survey Date: September 26, 2012
Tort / AHD / ODI / ERD Ratio: 141 447 ° : 4427.906 ft / 5 947 : 0.472
Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 42' 45.76843", W 103° 47' 39.95978"
Location Grid N/E Y/X: N 623417.400 RUS. E 665752.100 RUS
CRS Grid Convergence Angle: 0.29124233 °
Grid Scale Factor: 0.99994055
Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 92.910 ° (Gnd North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3718.000 ft above
Seasid / Ground Elevation: 3693.000 ft above
Magnetic Declination: 7.673 °
Total Field Strength: 48745.766 nT
Magnetic Dip Angle: 60.536 °
Declination Date: September 26, 2012
Magnetic Declination Model: BGGM 2012
North Reference: Gnd North
Grid Convergence Used: 0.291 °
Total Corr Mag North-Grid North: 7.381 °
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
Tie-In	0.00	0.00	0.00	0.00	0.00	N 0.00	E 0.00	0.00	0.00	N/A	284.91M
Marker MudLine	25.00	0.11	284.91	25.00	-0.02	N 0.01	W 0.02	0.02	284.91	0.42	284.91M
	100.00	0.42	284.91	100.00	-0.36	N 0.09	W 0.35	0.37	284.91	0.42	286.05M
	200.00	1.36	286.05	199.99	-1.87	N 0.52	W 1.85	1.92	285.61	0.94	282.57M
	300.00	1.48	282.57	299.96	-4.30	N 1.13	W 4.25	4.40	284.64	0.15	283.22M
	400.00	1.56	283.22	399.92	-6.91	N 1.72	W 6.84	7.05	284.11	0.08	299.89M
	500.00	1.36	299.89	499.89	-9.31	N 2.62	W 9.19	9.56	285.92	0.47	297.63M
	600.00	1.28	297.63	599.86	-11.38	N 3.73	W 11.21	11.81	286.41	0.10	290.58M
	700.00	1.07	290.56	699.84	-13.29	N 4.58	W 13.07	13.85	289.29	0.25	296.12M
	800.00	1.30	296.12	799.82	-15.22	N 5.40	W 14.96	15.91	289.85	0.26	302.22M
	900.00	1.29	302.22	899.79	-17.24	N 6.50	W 16.94	18.14	291.01	0.14	317.8M
	1000.00	1.61	301.80	999.76	-19.45	N 7.84	W 19.08	20.83	292.35	0.32	297.79M
	1100.00	1.61	297.79	1099.72	-21.96	N 9.24	W 21.52	23.42	293.24	0.11	309.68M
	1200.00	1.34	309.68	1199.69	-24.17	N 10.64	W 23.66	25.94	294.21	0.41	317.06M
	1300.00	1.02	317.06	1299.67	-25.75	N 12.04	W 25.17	27.90	295.56	0.35	326.08M
	1400.00	0.98	326.06	1399.65	-26.90	N 13.40	W 26.25	29.47	297.04	0.16	308.73M
	1500.00	1.01	308.73	1499.64	-28.12	N 14.66	W 27.42	31.09	298.14	0.30	280.09M
	1600.00	0.48	280.09	1599.63	-29.25	N 15.29	W 28.52	32.35	298.19	0.63	209.65M
	1700.00	0.14	209.65	1699.63	-29.72	N 15.25	W 28.99	32.76	297.75	0.45	100.57M
	1800.00	0.28	100.57	1799.63	-29.54	N 15.10	W 28.81	32.53	297.66	0.35	44.64M
	1900.00	0.17	44.64	1899.63	-29.20	N 15.16	W 28.46	32.25	298.04	0.23	355.56M
	2000.00	0.36	355.56	1999.63	-29.14	N 15.58	W 28.38	32.38	298.76	0.28	357.66M
	2100.00	0.60	357.66	2099.62	-29.23	N 16.42	W 28.43	32.83	300.01	0.24	8.21M
	2200.00	0.60	8.21	2199.62	-28.23	N 17.46	W 28.38	33.32	301.60	0.11	349.6M
	2300.00	0.28	349.60	2299.61	-29.23	N 18.22	W 28.35	33.69	302.73	0.35	16.97M
	2400.00	0.40	16.97	2399.61	-29.21	N 18.79	W 28.29	33.96	303.60	0.20	356.43M
	2500.00	0.68	356.43	2499.61	-29.19	N 19.72	W 28.22	34.43	304.94	0.34	328.18M
	2600.00	0.69	328.18	2599.60	-29.60	N 20.82	W 28.58	35.36	306.08	0.33	304.09M
	2700.00	0.42	304.09	2699.60	-30.25	N 21.54	W 29.20	36.28	306.42	0.35	287.44M
	2800.00	0.50	287.44	2799.59	-30.99	N 21.87	W 29.92	37.06	306.17	0.15	297.11M
	2900.00	0.48	297.11	2899.59	-31.79	N 22.20	W 30.71	37.89	305.86	0.08	282.99M
	3000.00	0.36	282.99	2999.59	-32.48	N 22.46	W 31.39	38.59	305.59	0.16	295.56M
	3100.00	0.48	295.56	3099.58	-33.18	N 22.71	W 32.07	39.30	305.30	0.15	284.22M
	3200.00	0.41	284.22	3199.58	-33.92	N 22.98	W 32.79	40.04	305.02	0.11	302.7M
	3225.00	0.52	302.70	3224.58	-34.11	N 23.06	W 32.98	40.24	304.97	0.74	304.07M
	3250.00	0.49	304.07	3249.58	-34.30	N 23.18	W 33.16	40.46	304.96	0.13	304.9M
	3275.00	0.45	304.90	3274.58	-34.47	N 23.30	W 33.33	40.67	304.95	0.16	311.77M
	3300.00	0.32	311.77	3299.58	-34.61	N 23.40	W 33.46	40.83	304.97	0.55	311.22M
	3325.00	0.22	311.22	3324.58	-34.70	N 23.48	W 33.55	40.95	304.98	0.40	313.9M
	3350.00	0.11	313.90	3349.58	-34.76	N 23.53	W 33.60	41.02	305.00	0.44	211.95M
	3375.00	0.05	211.95	3374.58	-34.78	N 23.54	W 33.63	41.05	304.99	0.52	170.79M
	3400.00	0.11	170.79	3399.58	-34.78	N 23.50	W 33.63	41.03	304.95	0.32	168.44M
	3425.00	0.06	168.44	3424.58	-34.77	N 23.47	W 33.62	41.00	304.91	0.20	79.47M
	3450.00	0.02	79.47	3449.58	-34.76	N 23.45	W 33.62	40.99	304.90	0.25	39.94M
	3475.00	0.07	39.94	3474.58	-34.75	N 23.47	W 33.60	40.98	304.93	0.22	32.72M
	3500.00	0.11	32.72	3499.58	-34.73	N 23.50	W 33.58	40.98	304.98	0.17	15.75M
	3525.00	0.14	15.75	3524.58	-34.71	N 23.55	W 33.56	41.00	305.06	0.19	351.12M
	3550.00	0.16	351.12	3549.58	-34.71	N 23.61	W 33.55	41.03	305.13	0.27	338.53M
	3575.00	0.18	338.53	3574.58	-34.73	N 23.68	W 33.57	41.09	305.20	0.17	327.63M
	3600.00	0.19	327.63	3599.58	-34.77	N 23.75	W 33.61	41.16	305.25	0.15	325.43M
	3625.00	0.21	325.43	3624.58	-34.83	N 23.83	W 33.66	41.24	305.29	0.09	333.07M
	3650.00	0.25	333.07	3649.58	-34.88	N 23.91	W 33.71	41.33	305.35	0.20	345.94M
	3675.00	0.30	345.94	3674.58	-34.93	N 24.03	W 33.75	41.43	305.44	0.32	352.03M
	3700.00	0.34	352.03	3699.58	-34.96	N 24.16	W 33.78	41.53	305.58	0.21	357.09M
	3725.00	0.34	357.09	3724.58	-34.98	N 24.31	W 33.79	41.63	305.73	0.12	358.67M
	3750.00	0.35	358.67	3749.57	-34.99	N 24.46	W 33.80	41.72	305.90	0.06	2.23M
	3775.00	0.33	2.23	3774.57	-35.00	N 24.61	W 33.80	41.81	306.06	0.12	2.01M
	3800.00	0.29	2.01	3799.57	-35.00	N 24.74	W 33.79	41.88	306.21	0.16	1.69M
	3825.00	0.27	1.69	3824.57	-35.01	N 24.87	W 33.79	41.95	306.35	0.08	356.56M
	3850.00	0.27	356.56	3849.57	-35.01	N 24.98	W 33.79	42.02	306.48	0.10	350.22M
	3875.00	0.27	350.22	3874.57	-35.03	N 25.10	W 33.80	42.10	306.60	0.12	340.43M
	3900.00	0.29	340.43	3899.57	-35.07	N 25.22	W 33.83	42.20	306.70	0.21	329.63M
	3925.00	0.32	329.63	3924.57	-35.13	N 25.34	W 33.89	42.31	306.78	0.26	323.32M
	3950.00	0.36	323.32	3949.57	-35.22	N 25.46	W 33.97	42.45	306.85	0.22	320.06M
	3975.00	0.42	320.06	3974.57	-35.33	N 25.59	W 34.08	42.62	306.91	0.26	320.49M
	4000.00	0.48	320.49	3999.57	-35.47	N 25.75	W 34.20	42.81	306.97	0.24	322.15M
	4025.00	0.54	322.15	4024.57	-35.61	N 25.92	W 34.34	43.03	307.04	0.25	326.28M
	4050.00	0.58	326.28	4049.57	-35.76	N 26.11	W 34.48	43.25	307.14	0.18	330.04M
	4075.00	0.56	330.04	4074.57	-35.90	N 26.32	W 34.61	43.48	307.25	0.15	331.96M
	4100.00	0.55	332.78	4099.57	-36.03	N 26.53	W 34.73	43.70	307.38	0.11	331.96M
	4125.00	0.54	331.96	4124.56	-36.15	N 26.74	W 34.84	43.92	307.51	0.05	330.63M
	4150.00	0.52	330.63	4149.56	-36.27	N 26.95	W 34.95	44.13	307.63	0.09	326.78M

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS (1/100ft)	TF (°)
	4175.00	0.51	326.76	4174.56	-38.40	N 27.14	W 35.06	44.34	307.74	0.14	324.47M
	4200.00	0.55	324.47	4199.56	-36.54	N 27.33	W 35.20	44.56	307.83	0.18	323.97M
	4225.00	0.61	323.87	4224.56	-36.70	N 27.53	W 35.34	44.80	307.92	0.24	325.02M
	4250.00	0.64	325.62	4249.56	-36.86	N 27.76	W 35.50	45.08	308.02	0.14	329.34M
	4275.00	0.67	329.34	4274.56	-37.03	N 28.00	W 35.65	45.33	308.14	0.21	331.85M
	4300.00	0.66	331.65	4299.56	-37.10	N 28.25	W 35.80	45.60	308.28	0.11	331.07M
	4325.00	0.67	331.07	4324.55	-37.34	N 28.51	W 35.94	45.87	308.42	0.05	328.91M
	4350.00	0.65	328.91	4349.55	-37.49	N 28.76	W 36.08	46.14	308.55	0.13	328.02M
	4375.00	0.67	328.02	4374.55	-37.66	N 29.00	W 36.23	46.41	308.68	0.09	326.07M
	4400.00	0.68	326.02	4399.55	-37.83	N 29.25	W 36.39	46.69	308.79	0.10	327.74M
	4425.00	0.68	327.70	4424.55	-38.00	N 29.50	W 36.55	46.97	308.90	0.06	330.47M
	4450.00	0.66	330.47	4449.55	-38.17	N 29.75	W 36.70	47.24	309.02	0.15	333.94M
	4475.00	0.62	333.90	4474.54	-38.31	N 29.99	W 36.83	47.50	309.16	0.22	335.78M
	4500.00	0.60	335.78	4499.54	-38.43	N 30.23	W 36.95	47.74	309.29	0.11	332.74M
	4525.00	0.58	332.70	4524.54	-38.58	N 30.47	W 37.06	47.97	309.42	0.15	330.11M
	4550.00	0.60	330.11	4549.54	-38.69	N 30.69	W 37.18	48.21	309.54	0.13	330.19M
	4575.00	0.64	330.19	4574.54	-38.84	N 30.93	W 37.32	48.47	309.65	0.16	331.04M
	4600.00	0.67	331.04	4599.54	-38.99	N 31.18	W 37.46	48.73	309.77	0.13	332.37M
	4625.00	0.70	332.37	4624.53	-39.15	N 31.44	W 37.60	49.01	309.90	0.14	333.45M
	4650.00	0.69	333.45	4649.53	-39.30	N 31.71	W 37.74	49.29	310.04	0.07	334.91M
	4675.00	0.68	334.91	4674.53	-39.44	N 31.98	W 37.87	49.58	310.18	0.08	333.33M
	4700.00	0.67	333.33	4699.53	-39.58	N 32.24	W 38.00	49.83	310.32	0.08	335.99M
	4725.00	0.68	335.99	4724.53	-39.72	N 32.51	W 38.12	50.10	310.46	0.13	338.16M
	4750.00	0.73	338.16	4749.53	-39.86	N 32.79	W 38.24	50.38	310.61	0.23	340.95M
	4775.00	0.80	340.95	4774.52	-39.99	N 33.11	W 38.36	50.67	310.80	0.32	343.52M
	4800.00	0.91	343.52	4799.52	-40.12	N 33.48	W 38.47	50.99	311.02	0.47	345.26M
	4825.00	1.01	345.26	4824.52	-40.25	N 33.85	W 38.58	51.34	311.27	0.42	347.11M
	4850.00	1.08	347.11	4849.51	-40.38	N 34.31	W 38.69	51.71	311.56	0.31	350.05M
	4875.00	1.10	350.05	4874.51	-40.50	N 34.77	W 38.79	52.09	311.88	0.24	350.89M
	4900.00	1.12	350.89	4899.50	-40.60	N 35.25	W 38.87	52.47	312.21	0.10	348.84M
	4925.00	1.11	348.84	4924.50	-40.71	N 35.73	W 38.95	52.86	312.53	0.18	345.98M
	4950.00	1.10	345.98	4949.49	-40.84	N 36.20	W 39.06	53.25	312.83	0.22	343.41M
	4975.00	1.10	343.41	4974.49	-40.99	N 36.66	W 39.18	53.66	313.10	0.20	340.49M
	5000.00	1.08	340.49	4999.49	-41.16	N 37.11	W 39.33	54.08	313.34	0.24	337.04M
	5025.00	1.07	337.04	5024.48	-41.35	N 37.55	W 39.50	54.50	313.55	0.26	334.08M
	5050.00	1.05	334.08	5049.48	-41.57	N 37.97	W 39.69	54.93	313.73	0.23	330.98M
	5075.00	1.07	330.98	5074.47	-41.80	N 38.38	W 39.90	55.37	313.89	0.24	326.09M
	5100.00	1.11	326.09	5099.47	-42.07	N 38.79	W 40.15	55.83	314.01	0.40	321.09M
	5125.00	1.16	321.09	5124.46	-42.38	N 39.19	W 40.45	56.32	314.09	0.44	316.39M
	5150.00	1.18	316.39	5149.46	-42.74	N 39.57	W 40.79	56.82	314.13	0.39	312.24M
	5175.00	1.22	312.24	5174.45	-43.13	N 39.93	W 41.16	57.35	314.14	0.38	308.82M
	5200.00	1.23	308.82	5199.45	-43.55	N 40.28	W 41.56	57.88	314.10	0.30	306.01M
	5225.00	1.24	308.01	5224.44	-43.99	N 40.62	W 41.99	58.42	314.05	0.08	309.26M
	5250.00	1.23	309.06	5249.44	-44.43	N 40.95	W 42.41	58.95	314.00	0.10	310.11M
	5275.00	1.27	310.11	5274.43	-44.87	N 41.30	W 42.83	59.50	313.96	0.18	310.24M
	5300.00	1.33	310.24	5299.42	-45.32	N 41.67	W 43.26	60.05	313.92	0.24	310.58M
	5325.00	1.38	310.58	5324.42	-45.79	N 42.05	W 43.71	60.65	313.89	0.20	310.85M
	5350.00	1.36	310.85	5349.41	-46.26	N 42.44	W 44.16	61.25	313.86	0.09	311.34M
	5375.00	1.36	311.30	5374.40	-46.73	N 42.83	W 44.61	61.84	313.83	0.04	311.09M
	5400.00	1.33	311.06	5399.39	-47.19	N 43.21	W 45.05	62.43	313.81	0.12	310.45M
	5425.00	1.29	310.45	5424.39	-47.64	N 43.59	W 45.49	63.00	313.78	0.17	307.15M
	5450.00	1.28	306.47	5449.38	-48.10	N 43.94	W 45.92	63.56	313.73	0.30	306.47M
	5475.00	1.28	306.47	5474.38	-48.56	N 44.28	W 46.37	64.12	313.67	0.07	306.32M
	5500.00	1.24	306.32	5499.37	-49.02	N 44.60	W 46.82	64.66	313.61	0.16	305.96M
	5525.00	1.21	305.66	5524.36	-49.47	N 44.92	W 47.25	65.19	313.55	0.13	305.58M
	5550.00	1.20	305.08	5549.36	-49.91	N 45.22	W 47.68	65.71	313.48	0.06	303.35M
	5575.00	1.15	303.35	5574.35	-50.35	N 45.51	W 48.10	66.22	313.41	0.25	302.33M
	5600.00	1.11	302.30	5599.35	-50.78	N 45.78	W 48.52	66.70	313.34	0.18	301.52M
	5625.00	1.07	301.52	5624.34	-51.19	N 46.03	W 48.92	67.17	313.28	0.17	300.17M
	5650.00	1.02	300.17	5649.34	-51.60	N 46.28	W 49.31	67.61	313.17	0.22	299.69M
	5675.00	1.03	299.69	5674.34	-51.99	N 46.48	W 49.70	68.05	313.09	0.06	299.02M
	5700.00	1.01	299.02	5699.33	-52.39	N 46.70	W 50.09	68.48	313.00	0.09	298.01M
	5725.00	1.02	298.01	5724.33	-52.79	N 46.91	W 50.48	68.91	312.91	0.08	298.08M
	5750.00	1.04	298.08	5749.32	-53.20	N 47.12	W 50.87	69.34	312.81	0.08	298.84M
	5775.00	1.01	298.00	5774.32	-53.60	N 47.33	W 51.27	69.78	312.72	0.12	298.15M
	5800.00	1.03	298.10	5799.32	-54.01	N 47.54	W 51.66	70.21	312.62	0.08	298.24M
	5825.00	1.04	298.24	5824.31	-54.41	N 47.76	W 52.06	70.65	312.53	0.04	297.23M
	5850.00	1.06	297.23	5849.31	-54.83	N 47.97	W 52.46	71.09	312.44	0.11	296.68M
	5875.00	1.12	296.68	5874.30	-55.27	N 48.19	W 52.89	71.55	312.34	0.24	297.13M
	5900.00	1.11	297.13	5899.30	-55.71	N 48.41	W 53.32	72.02	312.23	0.05	297.11M
	5925.00	1.12	297.11	5924.29	-56.15	N 48.63	W 53.75	72.49	312.13	0.04	295.21M
	5950.00	1.15	295.21	5949.29	-56.61	N 48.85	W 54.20	72.96	312.03	0.19	293.34M
	5975.00	1.16	293.34	5974.28	-57.08	N 49.05	W 54.66	73.44	311.91	0.18	291.17M
	6000.00	1.16	291.17	5999.28	-57.56	N 49.24	W 55.13	73.92	311.77	0.15	290.26M
	6025.00	1.14	290.26	6024.27	-58.03	N 49.42	W 55.60	74.39	311.63	0.11	289.12M
	6050.00	1.15	289.12	6049.27	-58.51	N 49.59	W 56.07	74.85	311.49	0.10	288.47M
	6075.00	1.13	288.47	6074.26	-58.99	N 49.75	W 56.54	75.31	311.34	0.10	287.14M
	6100.00	1.13	287.14	6099.26	-59.47	N 49.90	W 57.01	75.78	311.20	0.10	286.15M
	6125.00	1.16	286.15	6124.25	-59.95	N 50.04	W 57.49	76.22	311.04	0.14	284.87M
	6150.00	1.12	284.87	6149.25	-60.44	N 50.17	W 57.96	76.66	310.86	0.15	283.24M
	6175.00	1.13	283.24	6174.24	-60.92	N 50.29	W 58.44	77.10	310.72	0.13	282.17M
	6200.00	1.14	282.17	6199.24	-61.41	N 50.40	W 58.92	77.54	310.54	0.09	281.81M
	6225.00	1.12	281.81	6224.23	-61.89	N 50.50	W 59.41	77.97	310.37	0.09	280.56M
	6250.00	1.12	280.56	6249.23	-62.38	N 50.60	W 59.89	78.40	310.19	0.08	279.07M
	6275.00	1.12	278.07	6274.22	-62.86	N 50.68	W 60.37	78.82	310.01	0.19	274.97M
	6300.00	1.14	274.97	6299.22	-63.35	N 50.73	W 60.86	79.23	309.82	0.26	272.46M
	6325.00	1.17	272.46	6324.21	-63.86	N 50.77	W 61.36	79.64	309.60	0.24	269.69M
	6350.00	1.23	269.69	6349.21	-64.38	N 50.78	W 61.88	80.05	309.37	0.33	267.85M
	6375.00	1.30	267.85	6374.20	-64.93	N 50.78	W 62.44	80.47	309.11	0.32	267.43M
	6400.00	1.35	267.45	6399.20	-65.51	N 50.74	W 63.01	80.90	308.84	0.20	267.66M
	6425.00	1.37	267.66	6424.19	-66.10	N 50.71	W 63.61	81.35	308.57	0.08	267.44M
	6450.00	1.40	267.40	6449.18	-66.70	N 50.69	W 64.21	81.81	308.29	0.12	267.22M
	6475.00	1.42	267.20	6474.17	-67.31	N 50.66	W 64.82	82.27	308.01	0.08	266.11M
	6500.00	1.39	266.11	6499.17	-67.92	N 50.62	W 65.44	82.73	307.73	0.16	265.64M
	6525.00	1.39	265.64	6524.16	-68.52	N 50.58	W 66.04	83.18	307.45	0.05	265.46M
	6550.00	1.42	265.46	6549.15	-69.13						

Comments	MD	Incl	Azim Grid	TWD	VSEC	NS	EW	Closure	Closure	DLS	TF
(n)	(°)	(°)	(n)	(n)	(n)	(NS N)	(EW W)	(n)	(°)	(7100n)	(°)
6675.00	1.43		261.63	6674.11	-72.24	N 50.24	W 69.78	85.96	305.76	0.11	262.394
6700.00	1.47		262.39	6699.10	-72.86	N 50.07	W 70.40	86.44	305.47	0.15	262.694
6730.00	1.53		262.99	6724.09	-73.50	N 49.59	W 71.05	86.92	305.17	0.23	262.994
6760.00	1.58		263.58	6749.08	-74.17	N 49.50	W 71.72	87.42	304.86	0.12	262.594
6790.00	1.59		263.58	6774.07	-74.77	N 49.50	W 72.38	87.83	304.56	0.12	262.594
6820.00	1.50		263.03	6799.07	-75.50	N 49.82	W 73.06	88.43	304.26	0.04	263.034
6850.00	1.44		265.10	6824.06	-76.15	N 49.66	W 73.72	88.93	303.94	0.22	265.104
6875.00	1.40		266.71	6849.04	-76.79	N 49.02	W 74.36	89.42	303.74	0.32	266.714
6900.00	1.40		267.82	6874.04	-77.01	N 49.02	W 74.98	89.81	303.50	0.23	267.824
6925.00	1.38		267.45	6899.04	-76.81	N 49.02	W 75.59	90.40	303.27	0.11	267.454
6950.00	1.40		267.45	6924.03	-76.81	N 49.57	W 76.20	90.90	303.04	0.09	267.454
6975.00	1.44		268.01	6949.02	-76.81	N 49.48	W 76.80	91.39	302.82	0.15	268.014
7000.00	1.45		268.03	6974.01	-76.81	N 49.48	W 77.42	91.86	302.56	0.26	268.034
7025.00	1.45		268.03	7000.00	-76.81	N 49.48	W 78.04	92.36	302.33	0.33	268.034
7050.00	1.43		268.03	7024.00	-76.81	N 49.48	W 78.65	92.83	302.07	0.42	268.034
7075.00	1.39		268.03	7049.00	-76.81	N 49.48	W 79.25	93.23	301.78	0.48	268.034
7100.00	1.35		268.03	7074.00	-76.81	N 49.48	W 79.83	93.61	301.48	0.54	268.034
7125.00	1.31		268.03	7099.00	-76.81	N 49.48	W 80.37	93.93	301.18	0.51	268.034
7150.00	1.32		268.03	7124.00	-76.81	N 49.48	W 80.96	94.19	300.86	0.45	268.034
7175.00	1.28		268.03	7149.00	-76.81	N 49.48	W 81.50	94.40	300.54	0.40	268.034
7200.00	1.24		268.03	7174.00	-76.81	N 49.48	W 82.04	94.61	300.20	0.27	268.034
7225.00	1.20		268.03	7199.00	-76.81	N 49.48	W 82.58	94.82	299.86	0.24	268.034
7250.00	1.18		268.03	7224.00	-76.81	N 49.48	W 83.12	95.03	299.52	0.16	268.034
7275.00	1.14		268.03	7249.00	-76.81	N 49.48	W 83.66	95.24	299.18	0.22	268.034
7300.00	1.14		268.03	7274.00	-76.81	N 49.48	W 84.20	95.45	298.84	0.22	268.034
7325.00	1.13		268.03	7299.00	-76.81	N 49.48	W 84.74	95.66	298.50	0.09	268.034
7350.00	1.13		268.03	7324.00	-76.81	N 49.48	W 85.28	95.87	298.16	0.28	268.034
7375.00	1.13		268.03	7349.00	-76.81	N 49.48	W 85.82	96.08	297.82	0.28	268.034
7400.00	1.13		268.03	7374.00	-76.81	N 49.48	W 86.36	96.29	297.48	0.28	268.034
7425.00	1.13		268.03	7399.00	-76.81	N 49.48	W 86.90	96.50	297.14	0.28	268.034
7450.00	1.13		268.03	7424.00	-76.81	N 49.48	W 87.44	96.71	296.80	0.28	268.034
7475.00	1.13		268.03	7449.00	-76.81	N 49.48	W 87.98	96.92	296.46	0.28	268.034
7500.00	1.13		268.03	7474.00	-76.81	N 49.48	W 88.52	97.13	296.12	0.28	268.034
7525.00	1.13		268.03	7499.00	-76.81	N 49.48	W 89.06	97.34	295.78	0.28	268.034
7550.00	1.13		268.03	7524.00	-76.81	N 49.48	W 89.60	97.55	295.44	0.28	268.034
7575.00	1.13		268.03	7549.00	-76.81	N 49.48	W 90.14	97.76	295.10	0.28	268.034
7600.00	1.13		268.03	7574.00	-76.81	N 49.48	W 90.68	97.97	294.76	0.28	268.034
7625.00	1.13		268.03	7599.00	-76.81	N 49.48	W 91.22	98.18	294.42	0.28	268.034
7650.00	1.13		268.03	7624.00	-76.81	N 49.48	W 91.76	98.39	294.08	0.28	268.034
7675.00	1.13		268.03	7649.00	-76.81	N 49.48	W 92.30	98.60	293.74	0.28	268.034
7700.00	1.13		268.03	7674.00	-76.81	N 49.48	W 92.84	98.81	293.40	0.28	268.034
7725.00	1.13		268.03	7699.00	-76.81	N 49.48	W 93.38	99.02	293.06	0.28	268.034
7750.00	1.13		268.03	7724.00	-76.81	N 49.48	W 93.92	99.23	292.72	0.28	268.034
7775.00	1.13		268.03	7749.00	-76.81	N 49.48	W 94.46	99.44	292.38	0.28	268.034
7800.00	1.13		268.03	7774.00	-76.81	N 49.48	W 95.00	99.65	292.04	0.28	268.034
7825.00	1.13		268.03	7799.00	-76.81	N 49.48	W 95.54	99.86	291.70	0.28	268.034
7850.00	1.13		268.03	7824.00	-76.81	N 49.48	W 96.08	100.07	291.36	0.28	268.034
7875.00	1.13		268.03	7849.00	-76.81	N 49.48	W 96.62	100.28	291.02	0.28	268.034
7900.00	1.13		268.03	7874.00	-76.81	N 49.48	W 97.16	100.49	290.68	0.28	268.034
7925.00	1.13		268.03	7899.00	-76.81	N 49.48	W 97.70	100.70	290.34	0.28	268.034
7950.00	1.13		268.03	7924.00	-76.81	N 49.48	W 98.24	100.91	290.00	0.28	268.034
7975.00	1.13		268.03	7949.00	-76.81	N 49.48	W 98.78	101.12	289.66	0.28	268.034
8000.00	1.13		268.03	7974.00	-76.81	N 49.48	W 99.32	101.33	289.32	0.28	268.034
8025.00	1.13		268.03	7999.00	-76.81	N 49.48	W 99.86	101.54	288.98	0.28	268.034
8050.00	1.13		268.03	8024.00	-76.81	N 49.48	W 100.38	101.75	288.64	0.28	268.034
8075.00	1.13		268.03	8049.00	-76.81	N 49.48	W 100.92	101.96	288.30	0.28	268.034
8100.00	1.13		268.03	8074.00	-76.81	N 49.48	W 101.46	102.17	287.96	0.28	268.034
8125.00	1.13		268.03	8099.00	-76.81	N 49.48	W 102.00	102.38	287.62	0.28	268.034
8150.00	1.13		268.03	8124.00	-76.81	N 49.48	W 102.54	102.59	287.28	0.28	268.034
8175.00	1.13		268.03	8149.00	-76.81	N 49.48	W 103.08	102.80	286.94	0.28	268.034
8200.00	1.13		268.03	8174.00	-76.81	N 49.48	W 103.62	103.01	286.60	0.28	268.034
8225.00	1.13		268.03	8199.00	-76.81	N 49.48	W 104.16	103.22	286.26	0.28	268.034
8250.00	1.13		268.03	8224.00	-76.81	N 49.48	W 104.70	103.43	285.92	0.28	268.034
8275.00	1.13		268.03	8249.00	-76.81	N 49.48	W 105.24	103.64	285.58	0.28	268.034
8300.00	1.13		268.03	8274.00	-76.81	N 49.48	W 105.78	103.85	285.24	0.28	268.034
8325.00	1.13		268.03	8299.00	-76.81	N 49.48	W 106.32	104.06	284.90	0.28	268.034
8350.00	1.13		268.03	8324.00	-76.81	N 49.48	W 106.86	104.27	284.56	0.28	268.034
8375.00	1.13		268.03	8349.00	-76.81	N 49.48	W 107.40	104.48	284.22	0.28	268.034
8400.00	1.13		268.03	8374.00	-76.81	N 49.48	W 107.94	104.69	283.88	0.28	268.034
8425.00	1.13		268.03	8399.00	-76.81	N 49.48	W 108.48	104.90	283.54	0.28	268.034
8450.00	1.13		268.03	8424.00	-76.81	N 49.48	W 109.02	105.11	283.20	0.28	268.034
8475.00	1.13		268.03	8449.00	-76.81	N 49.48	W 109.56	105.32	282.86	0.28	268.034
8500.00	1.13		268.03	8474.00	-76.81	N 49.48	W 110.10	105.53	282.52	0.28	268.034
8525.00	1.13		268.03	8499.00	-76.81	N 49.48	W 110.64	105.74	282.18	0.28	268.034
8550.00	1.13		268.03	8524.00	-76.81	N 49.48	W 111.18	105.95	281.84	0.28	268.034
8575.00	1.13		268.03	8549.00	-76.81	N 49.48	W 111.72	106.16	281.50	0.28	268.034
8600.00	1.13		268.03	8574.00	-76.81	N 49.48	W 112.26	106.37	281.16	0.28	268.034
8625.00	1.13		268.03	8599.00	-76.81	N 49.48	W 112.80	106.58	280.82	0.28	268.034
8650.00	1.13		268.03	8624.00	-76.81	N 49.48	W 113.34	106.79	280.48	0.28	268.034
8675.00	1.13		268.03	8649.00	-76.81	N 49.48	W 113.88	107.00	280.14	0.28	268.034
8700.00	1.13		268.03	8674.00	-76.81	N 49.48	W 114.42	107.21	279.80	0.28	268.034
8725.00	1.13		268.03	8699.00	-76.81	N 49.48	W 114.96	107.42	279.46	0.28	268.034
8750.00	1.13		268.03	8724.00	-76.81	N 49.48	W 115.50	107.63	279.12	0.28	268.034
8775.00	1.13		268.03	8749.00	-76.81	N 49.48	W 116.04	107.84	278.78	0.28	268.034
8800.00	1.13		268.03	8774.00	-76.81	N 49.48	W 116.58	108.05	278.44	0.28	268.034
8825.00	1.13		268.03	8799.00	-76.81	N 49.48	W 117.12	108.26	278.10	0.28	268.034
8850.00	1.13		268.03	8824.00	-76.81	N 49.48	W 117.66	108.47	277.76	0.28	268.034
8875.00	1.13		268.03	8849.00	-76.81	N 49.48	W 118.20	108.68	277.42	0.28	268.034
8900.00	1.13		268.03	8874.00	-76.81	N 49.48	W 118.74	108.89	277.08	0.28	268.034
8925.00	1.13		268.03	8899.00	-76.81	N 49.48	W 119.28	109.10	276.74	0.28	268.034
8950.00	1.13		268.03	8924.00	-76.81	N 49.48	W 119.82	109.31	276.40	0.28	268.034
8975.00	1.13		268.03	8949.00	-76.81	N 49.48	W 120.36	109.52	276.06	0.28	268.034
9000.00	1.13		268.03	8974.00	-76.81	N 49.48	W 120.90	109.73	275.72	0.28	268.034
9025.00	1.13		268.03	8999.00	-76.81	N 49.48	W 121.44	109.94	275.38		

Comments	MD (ft)	Incl (°)	Azim Grd (°)	TWD (ft)	VSEC	NS (N/S)	EW (E/W)	Closure (ft)	Closure Azimuth (°)	DLS (1/1000)	TF (°)
DMAG	9378.00	61.22	91.02	9220.59	311.74	S 4.74	E 311.90	311.94	89.87	8.33	2.96R
DMAG	9410.00	64.15	91.19	9241.27	340.15	S 5.28	E 340.33	340.37	90.89	9.17	0.22L
DMAG	9441.00	66.51	91.18	9254.21	368.31	S 5.87	E 368.49	368.53	90.91	7.61	12.22R
DMAG	9475.00	68.75	91.70	9256.39	397.89	S 6.61	E 398.07	398.12	90.95	7.16	8.81R
DMAG	9504.00	71.32	92.12	9276.87	427.02	S 7.58	E 427.19	427.25	91.07	6.39	0.57L
DMAG	9535.00	74.23	92.09	9286.15	456.62	S 8.67	E 456.77	456.86	91.09	9.39	9.17L
DMAG	9567.00	76.46	91.72	9294.25	487.58	S 9.70	E 487.71	487.81	91.14	7.06	1.37L
DMAG	9599.00	78.51	91.67	9301.18	518.61	S 10.62	E 518.94	519.05	91.17	6.41	4.1L
DMAG	9632.00	80.85	91.50	9308.73	548.30	S 11.47	E 548.92	549.54	91.20	7.57	4.18L
DMAG	9665.00	82.76	91.36	9311.29	580.96	S 12.26	E 581.08	581.21	91.21	5.96	12.59R
DMAG	9699.00	85.25	91.92	9314.53	611.76	S 13.14	E 611.90	612.04	91.23	8.23	12.59R
DMAG	9725.00	87.91	92.51	9316.44	643.71	S 14.37	E 643.92	643.98	91.26	8.06	10.59L
DMAG	9749.00	90.28	92.70	9317.03	685.71	S 15.48	E 685.78	685.85	91.28	8.06	10.59L
DMAG	9775.00	92.65	92.74	9317.45	727.66	S 16.61	E 727.73	727.85	91.31	7.29	83.34L
DMAG	9802.00	95.12	91.64	9315.95	769.68	S 17.76	E 769.77	769.85	91.33	6.41	157.55R
DMAG	9829.00	90.41	91.77	9315.02	811.66	S 18.96	E 811.61	811.93	91.48	0.36	96.34R
DMAG	9856.00	90.38	92.04	9314.37	853.64	S 19.28	E 853.62	853.93	91.54	0.29	90R
DMAG	9883.00	90.78	92.28	9313.75	895.63	S 20.63	E 895.62	895.92	91.60	0.26	16.15R
DMAG	9910.00	90.45	93.32	9313.07	937.63	S 22.02	E 937.62	937.90	91.69	1.11	161.88R
DMAG	9937.00	89.80	93.50	9312.79	979.62	S 23.42	E 979.61	979.89	91.81	0.62	115.02R
DMAG	10069.00	89.62	94.10	9313.17	1021.61	S 24.81	E 1021.60	1021.88	91.95	0.71	175.24L
DMAG	10161.00	89.38	94.08	9313.99	1063.60	S 26.21	E 1063.59	1063.87	92.08	0.26	95.66R
DMAG	10253.00	89.28	95.09	9315.10	1105.59	S 27.61	E 1105.58	1105.86	92.23	1.07	155.1R
DMAG	10345.00	89.00	95.72	9316.51	1147.58	S 29.01	E 1147.57	1147.85	92.40	0.33	162.38R
DMAG	10437.00	88.14	95.49	9318.96	1189.57	S 30.41	E 1189.56	1189.84	92.56	0.96	70.75L
DMAG	10529.00	88.35	94.33	9321.71	1231.56	S 31.81	E 1231.55	1231.83	92.67	1.27	68.74L
DMAG	10621.00	88.38	92.99	9324.39	1273.55	S 33.21	E 1273.54	1273.82	92.72	1.43	76.87L
DMAG	10713.00	88.36	92.99	9326.53	1315.54	S 34.61	E 1315.53	1315.81	92.78	0.66	77.4L
DMAG	10805.00	88.52	92.39	9329.22	1357.53	S 36.01	E 1357.52	1357.80	92.83	0.83	85.03L
DMAG	10897.00	88.69	91.63	9331.34	1399.52	S 37.41	E 1399.51	1399.79	92.89	0.49	97.67R
DMAG	10989.00	88.73	91.17	9331.34	1441.51	S 38.81	E 1441.50	1441.78	92.95	0.56	77.48L
DMAG	11081.00	88.66	91.69	9333.46	1483.50	S 40.21	E 1483.49	1483.77	93.01	0.69	125.11R
DMAG	11173.00	88.80	91.06	9335.56	1525.49	S 41.61	E 1525.48	1525.76	93.07	0.96	95.49L
DMAG	11265.00	88.21	91.60	9337.96	1567.48	S 43.01	E 1567.47	1567.75	93.13	0.79	81.77R
DMAG	11357.00	88.20	91.07	9340.80	1609.47	S 44.41	E 1609.46	1609.74	93.19	0.82	96.48R
DMAG	11449.00	88.32	91.83	9343.65	1651.46	S 45.81	E 1651.45	1651.73	93.24	1.01	77.35R
DMAG	11541.00	88.38	92.75	9346.50	1693.45	S 47.21	E 1693.44	1693.72	93.29	0.33	187.06R
DMAG	11633.00	88.49	93.27	9349.35	1735.44	S 48.61	E 1735.43	1735.71	93.34	0.39	98.08R
DMAG	11725.00	88.75	93.45	9352.20	1777.43	S 50.01	E 1777.42	1777.70	93.39	0.19	109.39L
DMAG	11817.00	89.01	93.63	9355.05	1819.42	S 51.41	E 1819.41	1819.69	93.44	0.38	73.07R
DMAG	11909.00	89.21	93.81	9357.90	1861.41	S 52.81	E 1861.40	1861.69	93.49	0.25	78.69R
DMAG	12001.00	89.41	94.00	9360.75	1903.40	S 54.21	E 1903.39	1903.67	93.54	0.25	125.01R
DMAG	12093.00	89.61	94.18	9363.60	1945.39	S 55.61	E 1945.38	1945.66	93.59	0.13	72.36L
DMAG	12185.00	89.81	94.36	9366.45	1987.38	S 57.01	E 1987.37	1987.65	93.64	0.94	137.66L
DMAG	12277.00	89.45	94.54	9369.30	2029.37	S 58.41	E 2029.36	2029.64	93.69	0.49	60.12L
DMAG	12369.00	89.11	93.00	9372.15	2071.36	S 59.81	E 2071.35	2071.63	93.74	0.57	101.11L
DMAG	12461.00	88.11	93.00	9375.00	2113.35	S 61.21	E 2113.34	2113.62	93.79	0.55	71.08L
DMAG	12553.00	88.30	92.53	9377.85	2155.34	S 62.61	E 2155.33	2155.61	93.84	0.78	98.89L
DMAG	12645.00	88.28	92.02	9380.70	2197.33	S 64.01	E 2197.32	2197.60	93.89	0.69	77.4L
DMAG	12737.00	88.52	91.32	9383.55	2239.32	S 65.41	E 2239.31	2239.59	93.94	0.00	
DMAG	12829.00	88.52	90.88	9386.40	2281.31	S 66.81	E 2281.30	2281.58	93.99	0.00	
DMAG	12921.00	88.42	90.68	9389.25	2323.30	S 68.21	E 2323.29	2323.57	94.04	0.00	
DMAG	13013.00	88.42	90.68	9392.10	2365.29	S 69.61	E 2365.28	2365.56	94.09	0.00	
DMAG	13105.00	88.42	90.68	9394.95	2407.28	S 71.01	E 2407.27	2407.55	94.14	0.00	
DMAG	13197.00	88.42	90.68	9397.80	2449.27	S 72.41	E 2449.26	2449.54	94.19	0.00	
DMAG	13289.00	88.42	90.68	9400.65	2491.26	S 73.81	E 2491.25	2491.53	94.24	0.00	
DMAG	13381.00	88.42	90.68	9403.50	2533.25	S 75.21	E 2533.24	2533.52	94.29	0.00	
DMAG	13473.00	88.42	90.68	9406.35	2575.24	S 76.61	E 2575.23	2575.51	94.34	0.00	
DMAG	13565.00	88.42	90.68	9409.20	2617.23	S 78.01	E 2617.22	2617.50	94.39	0.00	
DMAG	13657.00	88.42	90.68	9412.05	2659.22	S 79.41	E 2659.21	2659.49	94.44	0.00	
DMAG	13749.00	88.42	90.68	9414.90	2701.21	S 80.81	E 2701.20	2701.48	94.49	0.00	
DMAG	13841.00	88.42	90.68	9417.75	2743.20	S 82.21	E 2743.19	2743.47	94.54	0.00	
DMAG	13933.00	88.42	90.68	9420.60	2785.19	S 83.61	E 2785.18	2785.46	94.59	0.00	
DMAG	14025.00	88.42	90.68	9423.45	2827.18	S 85.01	E 2827.17	2827.45	94.64	0.00	
DMAG	14117.00	88.42	90.68	9426.30	2869.17	S 86.41	E 2869.16	2869.44	94.69	0.00	
DMAG	14209.00	88.42	90.68	9429.15	2911.16	S 87.81	E 2911.15	2911.43	94.74	0.00	
DMAG	14301.00	88.42	90.68	9432.00	2953.15	S 89.21	E 2953.14	2953.42	94.79	0.00	
DMAG	14393.00	88.42	90.68	9434.85	2995.14	S 90.61	E 2995.13	2995.41	94.84	0.00	
DMAG	14485.00	88.42	90.68	9437.70	3037.13	S 92.01	E 3037.12	3037.40	94.89	0.00	
DMAG	14577.00	88.42	90.68	9440.55	3079.12	S 93.41	E 3079.11	3079.39	94.94	0.00	
DMAG	14669.00	88.42	90.68	9443.40	3121.11	S 94.81	E 3121.10	3121.38	94.99	0.00	
DMAG	14761.00	88.42	90.68	9446.25	3163.10	S 96.21	E 3163.09	3163.37	95.04	0.00	
DMAG	14853.00	88.42	90.68	9449.10	3205.09	S 97.61	E 3205.08	3205.36	95.09	0.00	
DMAG	14945.00	88.42	90.68	9451.95	3247.08	S 99.01	E 3247.07	3247.35	95.14	0.00	
DMAG	15037.00	88.42	90.68	9454.80	3289.07	S 100.41	E 3289.06	3289.34	95.19	0.00	
DMAG	15129.00	88.42	90.68	9457.65	3331.06	S 101.81	E 3331.05	3331.33	95.24	0.00	
DMAG	15221.00	88.42	90.68	9460.50	3373.05	S 103.21	E 3373.04	3373.32	95.29	0.00	
DMAG	15313.00	88.42	90.68	9463.35	3415.04	S 104.61	E 3415.03	3415.31	95.34	0.00	
DMAG	15405.00	88.42	90.68	9466.20	3457.03	S 106.01	E 3457.02	3457.30	95.39	0.00	
DMAG	15497.00	88.42	90.68	9469.05	3499.02	S 107.41	E 3499.01	3499.29	95.44	0.00	
DMAG	15589.00	88.42	90.68	9471.90	3541.01	S 108.81	E 3541.00	3541.28	95.49	0.00	
DMAG	15681.00	88.42	90.68	9474.75	3583.00	S 110.21	E 3583.00	3583.28	95.54	0.00	
DMAG	15773.00	88.42	90.68	9477.60	3625.00	S 111.61	E 3625.00	3625.28	95.59	0.00	
DMAG	15865.00	88.42	90.68	9480.45	3666.99	S 113.01	E 3666.98	3667.27	95.64	0.00	
DMAG	15957.00	88.42	90.68	9483.30	3708.98	S 114.41	E 3708.97	3709.25	95.69	0.00	
DMAG	16049.00	88.42	90.68	9486.15	3750.97	S 115.81	E 3750.96	3751.24	95.74	0.00	
DMAG	16141.00	88.42	90.68	9489.00	3792.96	S 117.21	E 3792.95	3793.23	95.79	0.00	
DMAG	16233.00	88.42	90.68	9491.85	3834.95	S 118.61	E 3834.94	3835.22	95.84	0.00	
DMAG	16325.00	88.42	90.68	9494.70	3876.94	S 120.01	E 3876.93	3877.21	95.89	0.00	
DMAG	16417.00	88.42	90.68	9497.55	3918.93	S 121.41	E 3918.92	3919.20	95.94	0.00	
DMAG	16509.00	88.42	90.68	9500.40	3960.92	S 122.81	E 3960.91	3961.19	95.99	0.00	
DMAG	16601.00	88.42	90.68	9503.25	4002.91	S 124.21	E 4002.90	4003.18	96.04	0.00	
DMAG	16693.00	88.42	90.68	9506.10	4044.90	S 125.61	E 4044.89	4045.17	96.09	0.00	
DMAG	16785.00	88.42	90.68	950							

HOBBS OGD
APR 30 2013
RECEIVED

CHEVRON

Lusk

Lea County, NM

Cross Bones 2 29 #1H

VH - Job #32K09121211

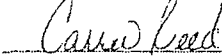
Survey: Gyro

SDI Standard Survey Report

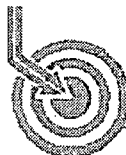
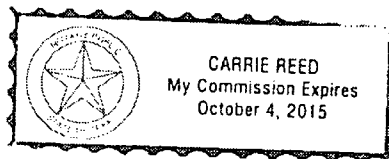
This survey is correct to the best of my knowledge and is supported by actual field data.



Notarized this date 8th of October, 2012.



Notary Signature
County of Midland
State of Texas



Scientific Drilling

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	CHEVRON	Local Co-ordinate Reference:	Well Cross Bones 2 29 #1H
Project:	Lusk	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Cross Bones 2 29 #1H	North Reference:	Grid
Wellbore:	VH - Job #32K09121211	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K09121211	Database:	EDM-Regulatory

Project:	Lusk		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Lea County, NM
Site Position:	Northing: 623,417.24 usft Latitude: 32° 42' 45.767 N
From: Lat/Long	Easting: 665,752.18 usft Longitude: 103° 47' 39.959 W
Position Uncertainty: 0.00 usft	Slot Radius: 13-3/16" Grid Convergence: 0.29 °

Well:	Cross Bones 2 29 #1H, Directional (Pathfinder)
Well Position +N/-S	0.00 usft Northing: 623,417.24 usft Latitude: 32° 42' 45.767 N
+E/-W	0.00 usft Easting: 665,752.18 usft Longitude: 103° 47' 39.959 W
Position Uncertainty	0.00 usft Wellhead Elevation: usft Ground Level: 0.00 usft

Wellbore:	VH - Job #32K09121211
Magnetics	Model Name Sample Date Declination Dip Angle Field Strength
	IGRF2010 09/25/12 7.57 60.57 48,784

Design:	VH - Job #32K09121211
Audit Notes:	
Version: 1.0	Phase: ACTUAL Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) +N/-S +E/-W Direction
	(usft) (usft) (usft) (°)
	0.00 0.00 0.00 305.02

Survey Program	Date 10/21/12
From To	Survey (Wellbore) Tool Name Description
(usft) (usft)	
100.00 3,200.00	Gyro (VH - Job #32K09121211) Keeper Keeper Gyro

Survey	
Measured Depth Inclination Azimuth True Vertical North/South East/West Closure Azimuth Closure Distance	
(usft) (°) (°) Depth (usft) (usft) (usft) (°) (usft)	
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	
100.00 0.42 284.91 100.00 0.09 -0.35 284.91 0.37	
200.00 1.36 286.05 199.99 0.52 -1.85 285.61 1.92	
300.00 1.48 282.57 299.96 1.13 -4.25 284.84 4.40	
400.00 1.56 283.22 399.92 1.72 -6.84 284.11 7.05	
500.00 1.36 299.89 499.89 2.62 -9.19 285.92 9.56	
600.00 1.28 297.63 599.86 3.73 -11.21 288.41 11.81	
700.00 1.07 290.56 699.84 4.58 -13.07 289.29 13.85	
800.00 1.30 296.12 799.82 5.40 -14.96 289.85 15.91	
900.00 1.29 302.22 899.79 6.50 -16.94 291.01 18.14	
1,000.00 1.61 301.80 999.76 7.84 -19.08 292.35 20.63	
1,100.00 1.61 297.79 1,099.72 9.24 -21.52 293.24 23.42	

Scientific Drilling International, Inc.

SDI Standard Survey Report



Company: CHEVRON
Project: Lusk
Site: Lea County, NM
Well: Cross Bones 2 29 #1H
Wellbore: VH - Job #32K09121211
Design: VH - Job #32K09121211

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well Cross Bones 2 29 #1H
WELL @ 0.00usft (Original Well Elev)
WELL @ 0.00usft (Original Well Elev)
Grid
Minimum Curvature
EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,200.00	1.34	309.68	1,199.69	10.64	-23.66	294.21	25.94
1,300.00	1.02	317.06	1,299.67	12.04	-25.17	295.56	27.90
1,400.00	0.98	326.08	1,399.65	13.40	-26.25	297.04	29.47
1,500.00	1.01	308.73	1,499.64	14.66	-27.42	298.14	31.09
1,600.00	0.48	280.09	1,599.63	15.29	-28.52	298.19	32.35
1,700.00	0.14	209.65	1,699.63	15.25	-28.99	297.75	32.76
1,800.00	0.28	100.57	1,799.63	15.10	-28.81	297.66	32.53
1,900.00	0.17	44.64	1,899.63	15.16	-28.46	298.04	32.25
2,000.00	0.36	355.56	1,999.63	15.58	-28.38	298.76	32.38
2,100.00	0.60	357.66	2,099.62	16.42	-28.43	300.01	32.83
2,200.00	0.60	8.21	2,199.62	17.46	-28.38	301.60	33.32
2,300.00	0.28	349.60	2,299.61	18.22	-28.35	302.73	33.69
2,400.00	0.40	16.97	2,399.61	18.79	-28.29	303.60	33.96
2,500.00	0.68	356.43	2,499.61	19.72	-28.22	304.94	34.43
2,600.00	0.69	328.18	2,599.60	20.82	-28.58	306.08	35.36
2,700.00	0.42	304.09	2,699.60	21.54	-29.20	306.42	36.28
2,800.00	0.50	287.44	2,799.59	21.87	-29.92	306.17	37.06
2,900.00	0.48	297.11	2,899.59	22.20	-30.71	305.86	37.89
3,000.00	0.36	282.99	2,999.58	22.46	-31.39	305.59	38.59
3,100.00	0.48	295.56	3,099.58	22.71	-32.07	305.30	39.30
3,200.00	0.41	284.22	3,199.58	22.98	-32.79	305.02	40.04

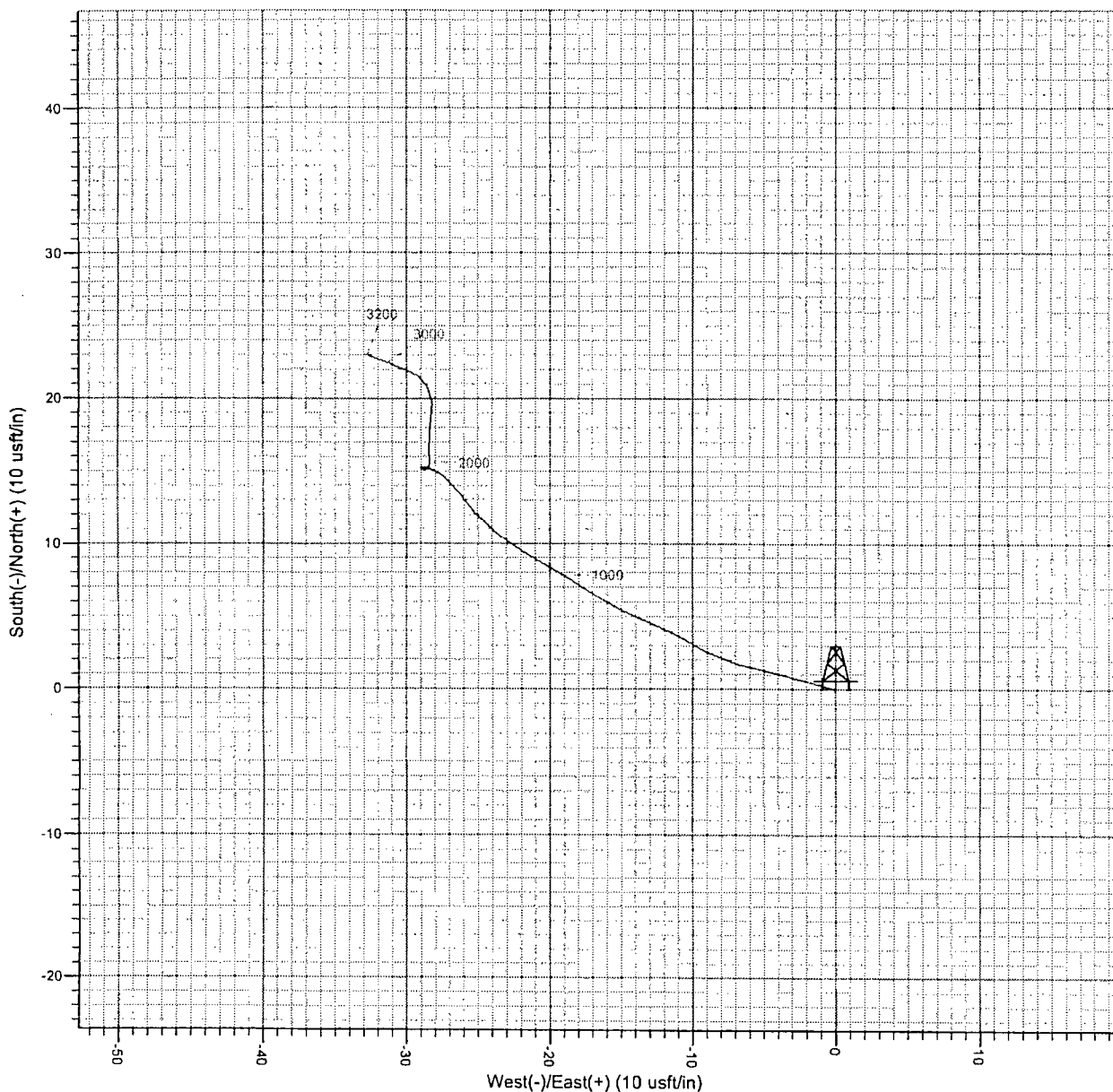


Scientific Drilling

Project: Lusk
Lea County, NM
Well: Cross Bones 2 29 #1H
Wellbore: VH - Job #32K09121211
Design: VH - Job #32K09121211

WELL DETAILS: Cross Bones 2 29 #1H
WELL @ 0.00usft (Original Well Elev)
Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	623417.24	665752.18	32° 42' 45.767 N	103° 47' 39.959 W	



PROJECT DETAILS: Lusk	SITE DETAILS: Lea County, NM
Geodetic System: US State Plane 1927 (Exact solution)	Site Centre Latitude: 32° 42' 45.767 N
Datum: NAD 1927 (NADCON CONUS)	Longitude: 103° 47' 39.959 W
Ellipsoid: Clarke 1866	Positional Uncertainty: 0.00
Zone: New Mexico East 3001	Convergence: 0.29
System Datum: Mean Sea Level	Local North: Grid