

GEOSITE, INC.

GEOLOGICAL WELL SITE SERVICE
Office: 325-655-4356 Fax 325-655-3100
Web Site: www.geosite.us E-mail: geosite@geosite.us

HYDROCARBON LOG

Vertical Log

1 : 450 SCALE 2 INCH

COMPANY	ICA ENERGY OPERATING LLC	
WELL	KIZER RANCH 5 #1	
FIELD	JENKINS, N. W.	
COUNTY	LEA	STATE NM
API #	<u>30-025-40542</u>	
LEGAL LOCATION		ELEVATION
330' FNL, 600' FWL, SEC 5, TOWNSHIP 9-S, RANGE 34-E		KB: 4321 DF: 0 GL: 4306
LAT: 33.569153 LONG: -103.493107		Log Measured From KB Elevation.
LOGGING INTERVAL		
START DATE :	8/19/2012	END DATE : 8/30/2012
START DEPTH:	1550	END DEPTH : 4829
PRINT START DEPTH:	1550	PRINT END DEPTH : 4879
LOGGING UNIT	LOGGERS	
# 2	JAMIE MADDOX	
RIG INFORMATION		MUD INFORMATION
CONTRACTOR :	UNITED DRILLING INC.	CONTRACTOR : NEW PARK MUD
RIG # :	42	ENGINEER : MIKE DAVIS
RIG PHONE :	575-623-7730	PHONE : 432-557-8254
TOOL PUSHER INFORMATION		COMPANY INFORMATION
TOOL PUSHER :	OMAR MORENO	REP : SHANE LOUGH
PUSHER PHONE :	575-840-8242	PHONE : 432-638-6945
PUSHER EMAIL :		EMAIL :

NOV 29 2012



Company: ICA Energy Operating
 Lease/Well: Kizer Ranch 5 / No. 001

30-025-40542

Rig Name: United 42
 State/County: New Mexico / Lea



Latitude: 33.57
 GRID North is 0.46 Degrees East of True North
 VS-Azi: 0.00 Degrees

Depth Reference : RKB = 19'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: kizer ranch 5 #1_ed.ut
 Minimum Curvature Method
 Report Date/Time: 9/4/2012 / 14:00

Vaughn Energy Services
 Gardendale, Texas
 432-563-5444

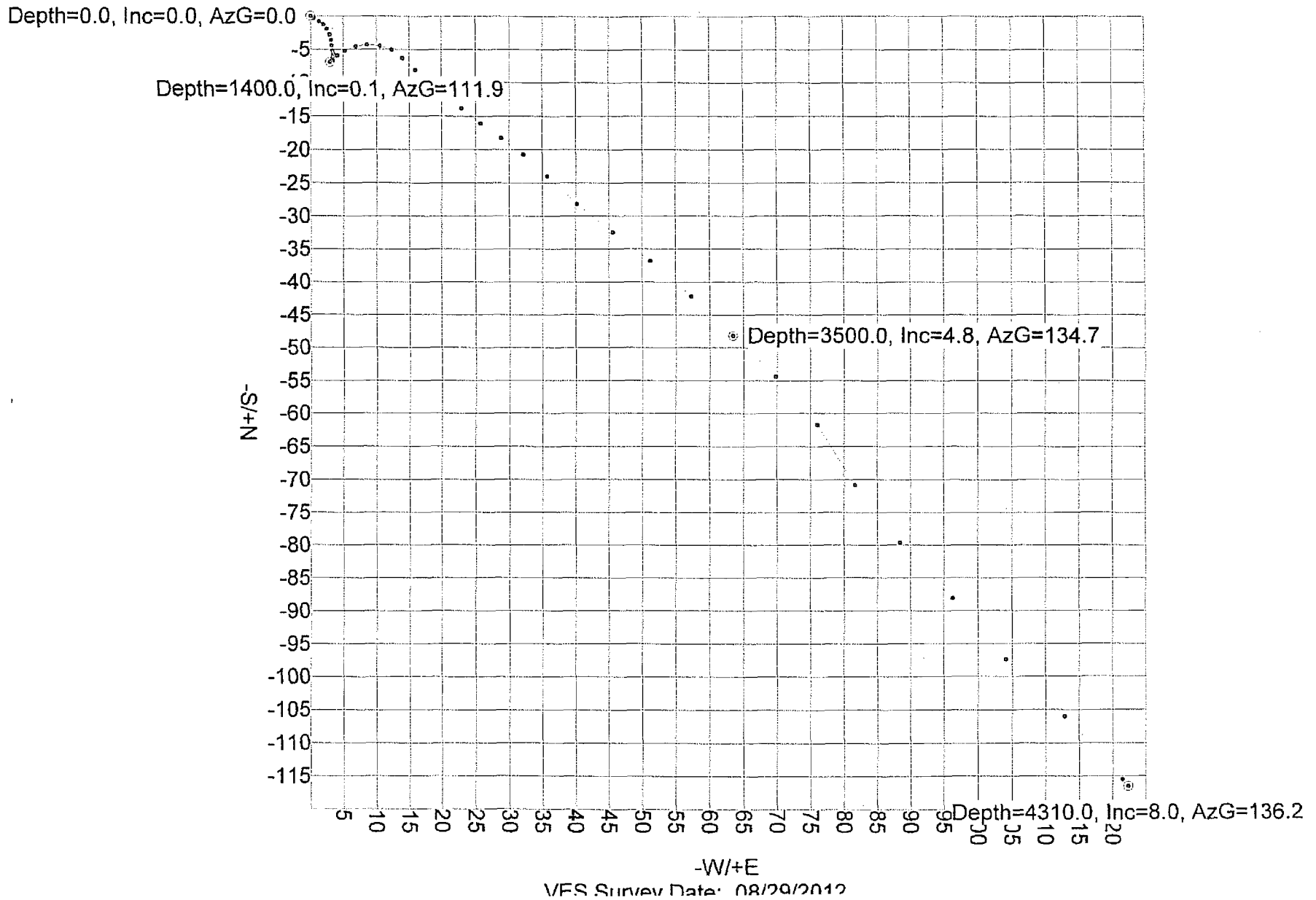
Surveyor: Danny Spring
 Kizer Ranch 5 No. 001 / API 30-025-40542

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.67	125.39	100.00	-0.34	0.48	-0.34	0.58	125.39	0.67
200.00	0.42	115.45	199.99	-0.84	1.29	-0.84	1.53	123.01	0.26
300.00	0.44	131.27	299.99	-1.24	1.90	-1.24	2.27	123.17	0.12
400.00	0.55	151.36	399.99	-1.92	2.42	-1.92	3.09	128.37	0.20
500.00	0.59	155.17	499.98	-2.80	2.86	-2.80	4.01	134.35	0.05
600.00	0.44	177.30	599.98	-3.65	3.10	-3.65	4.79	139.68	0.11
700.00	0.49	170.79	699.97	-4.45	3.18	-4.45	5.47	144.44	0.07
800.00	0.39	170.14	799.97	-5.20	3.31	-5.20	6.17	147.55	0.10
900.00	0.16	136.18	899.97	-5.63	3.46	-5.63	6.61	148.43	0.27
1000.00	0.10	192.35	999.97	-5.82	3.54	-5.82	6.81	148.69	0.13
1100.00	0.28	210.76	1099.97	-6.12	3.40	-6.12	7.00	150.97	0.19
1200.00	0.15	158.67	1199.97	-6.45	3.32	-6.45	7.26	152.80	0.23
1300.00	0.33	236.49	1299.97	-6.73	3.12	-6.73	7.42	155.11	0.33
1400.00	0.10	111.91	1399.97	-6.92	2.96	-6.92	7.53	156.85	0.39
1500.00	0.57	48.77	1499.97	-6.62	3.41	-6.62	7.45	152.74	0.54
1600.00	0.50	40.01	1599.96	-5.96	4.07	-5.96	7.22	145.68	0.11
1700.00	1.10	67.52	1699.95	-5.26	5.23	-5.26	7.42	135.15	0.69
1800.00	0.93	67.39	1799.94	-4.58	6.87	-4.58	8.26	123.72	0.17

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	1.09	93.85	1899.92	-4.33	8.57	-4.33	9.60	116.84	0.49
2000.00	1.15	95.13	1999.90	-4.49	10.51	-4.49	11.43	113.12	0.06
2100.00	1.07	119.72	2099.88	-5.04	12.32	-5.04	13.31	112.25	0.48
2200.00	1.35	136.18	2199.86	-6.35	13.94	-6.35	15.32	114.48	0.44
2300.00	1.68	127.90	2299.83	-8.10	15.91	-8.10	17.85	116.97	0.40
2400.00	1.61	126.72	2399.79	-9.84	18.20	-9.84	20.69	118.40	0.08
2500.00	1.66	133.46	2499.74	-11.68	20.38	-11.68	23.49	119.82	0.20
2600.00	2.13	128.54	2599.69	-13.83	22.88	-13.83	26.74	121.15	0.49
2700.00	2.02	126.87	2699.62	-16.05	25.75	-16.05	30.34	121.94	0.12
2800.00	2.33	125.42	2799.55	-18.28	28.81	-18.28	34.13	122.40	0.31
2900.00	2.32	128.53	2899.47	-20.72	32.05	-20.72	38.17	122.88	0.13
3000.00	3.27	134.59	2999.35	-23.99	35.67	-23.99	42.98	123.92	0.00
3100.00	3.82	130.99	3099.16	-28.17	40.22	-28.17	49.10	125.02	0.60
3200.00	4.01	127.09	3198.92	-32.47	45.52	-32.47	55.92	125.50	0.33
3300.00	4.13	128.15	3298.67	-36.81	51.15	-36.81	63.01	125.74	0.14
3400.00	5.14	133.33	3398.34	-42.11	57.24	-42.11	71.06	126.34	1.09
3500.00	4.84	134.72	3497.96	-48.16	63.50	-48.16	79.70	127.18	0.33
3600.00	5.31	134.79	3597.57	-54.39	69.78	-54.39	88.48	127.93	0.47
3700.00	5.74	143.79	3697.11	-61.69	76.03	-61.69	97.90	129.06	0.97
3800.00	6.63	152.94	3796.53	-70.86	81.61	-70.86	108.08	130.97	1.32
3900.00	6.37	130.88	3895.90	-79.64	88.43	-79.64	119.00	132.01	2.49
4000.00	6.94	143.14	3995.23	-88.10	96.25	-88.10	130.48	132.47	1.53
4100.00	7.04	136.31	4094.49	-97.37	104.11	-97.37	142.54	133.08	0.84
4200.00	7.05	133.05	4193.73	-105.99	112.83	-105.99	154.80	133.21	0.40
4300.00	7.74	141.92	4292.90	-115.48	121.47	-115.48	167.60	133.55	1.33
4310.00	8.00	136.22	4302.81	-116.52	122.36	-116.52	168.97	133.60	8.22




Vaughn Energy Services
Gardendale, Texas
432-563-5444
Surveyor: Danny Spring
Kizer Ranch 5 No. 001 / API 30-025-40542





I DANNY SPRING certify that I am employed by Vaughn Energy Services. That I did on the day(s) of 09/06/12 through 09/06/12 conduct or supervise the taking of a RATE GYRO survey from a depth of 0 feet to a depth of 4780 feet, that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the at the request of ICA OPERATING for the KIZER RANCH 5 Well # N. 03 API # 30-025-40542 in LEA County, New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services



DANNY SPRING
Service Technician
Vaughn Energy Services



Company: ICA ENERGY OPERATING
 Lease/Well: KIZER RANCH 5/NO: 001

Rig Name: PULLING UNIT
 State/County: NEW MEXICO/LEA
 Latitude: 33.57, Longitude: -103.49
 GRID North is 0.46 Degrees East of True North
 VS-Azi: 0.00 Degrees



Depth Reference : ELEV: 4323

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: kizer_ranch 5 #1 ha gyro_ed.ut

Minimum Curvature Method

Report Date/Time: 9/17/2012 / 12:41

Vaughn Energy Services

Gardendale, Texas

432-563-5444

Surveyor: Danny Spring

Kizer Ranch 5 No. 001 / API 30-025-40542

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Degleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	----
100.00	0.63	128.08	100.00	-0.34	0.43	-0.34	0.55	128.00	0.63
200.00	0.68	130.71	199.99	-1.06	1.31	-1.06	1.69	129.00	0.05
300.00	0.48	135.88	299.99	-1.76	2.06	-1.76	2.69	130.44	0.20
400.00	0.74	150.04	399.98	-2.60	2.66	-2.60	3.72	134.37	0.30
500.00	0.61	155.69	499.97	-3.65	3.20	-3.65	4.85	138.71	0.14
600.00	0.60	160.90	599.97	-4.63	3.60	-4.63	5.85	142.16	0.06
700.00	0.42	173.32	699.96	-5.49	3.81	-5.49	6.68	145.25	0.21
800.00	0.17	177.67	799.96	-6.01	3.86	-6.01	7.14	147.28	0.25
900.00	0.41	187.10	899.96	-6.51	3.82	-6.51	7.55	149.58	0.24
1000.00	0.43	190.81	999.96	-7.23	3.71	-7.23	8.12	152.84	0.03
1100.00	0.08	166.25	1099.96	-7.66	3.65	-7.66	8.48	154.48	0.36
1200.00	0.19	193.96	1199.96	-7.88	3.63	-7.88	8.68	155.26	0.12
1300.00	0.36	190.64	1299.96	-8.35	3.64	-8.35	9.06	157.04	0.17
1400.00	0.24	111.62	1399.96	-8.73	3.68	-8.73	9.47	157.17	0.39
1500.00	0.47	36.61	1499.95	-8.48	4.12	-8.48	9.43	154.10	0.47
1600.00	0.75	42.94	1599.95	-7.67	4.81	-7.67	9.05	147.92	0.28
1700.00	0.83	67.49	1699.94	-6.88	6.00	-6.88	9.13	138.89	0.40
1800.00	0.88	88.92	1789.93	-6.56	7.50	-6.56	9.96	131.15	0.34

Depth FT	Angle Deg	Dirn Direction Deg	TVD FT	+N/S FT	+E/W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1800.00	1.01	80.86	1899.91	-5.56	9.13	-5.55	11.24	125.67	0.16
2000.00	1.15	120.29	1999.90	-7.07	10.88	-7.07	12.98	123.03	0.55
2100.00	1.39	120.08	2099.87	-8.34	12.69	-8.34	15.19	123.32	0.31
2200.00	1.54	105.12	2199.04	-9.45	14.94	-9.45	17.68	122.33	0.62
2300.00	1.86	128.60	2299.00	-10.81	17.50	-10.81	20.57	121.71	0.75
2400.00	1.63	125.28	2399.75	-12.54	19.92	-12.54	23.59	122.40	0.24
2500.00	1.67	124.52	2499.71	-14.28	22.28	-14.28	26.46	122.67	0.06
2600.00	2.05	123.63	2599.66	-16.10	24.97	-16.10	29.71	122.82	0.38
2700.00	2.24	126.37	2699.59	-18.25	28.03	-18.25	33.44	123.07	0.21
2800.00	2.26	124.58	2799.51	-20.52	31.22	-20.52	37.36	123.32	0.07
2900.00	2.45	128.21	2899.42	-22.96	34.52	-22.96	41.46	123.63	0.24
3000.00	3.36	116.17	2999.30	-25.57	38.83	-25.57	46.50	123.37	1.09
3100.00	3.69	130.10	3099.11	-28.94	43.92	-28.94	52.60	123.38	0.92
3200.00	4.12	128.47	3198.88	-33.25	49.20	-33.25	59.38	124.05	0.44
3300.00	4.66	120.97	3298.68	-38.04	55.17	-38.04	67.01	124.59	0.54
3400.00	4.66	131.25	3398.25	-43.28	61.39	-43.28	75.11	125.18	0.19
3500.00	4.92	133.90	3497.90	-48.93	67.53	-48.93	83.40	125.93	0.34
3600.00	5.31	134.08	3597.50	-55.13	73.95	-55.13	92.24	126.70	0.39
3700.00	6.03	143.24	3697.01	-62.56	80.42	-62.56	101.89	127.88	1.15
3800.00	6.36	162.52	3796.43	-71.69	88.13	-71.69	112.06	129.77	1.05
3900.00	6.99	130.83	3895.77	-80.58	93.29	-80.58	123.28	130.82	2.58
4000.00	6.94	143.65	3995.04	-89.43	101.48	-89.43	135.27	131.39	1.55
4100.00	6.65	136.17	4094.34	-98.48	109.07	-98.48	146.95	132.08	0.93
4200.00	7.40	133.42	4193.58	-107.08	117.76	-107.08	159.16	132.28	0.83
4300.00	7.67	136.81	4292.72	-116.37	127.00	-116.37	172.28	132.50	0.52
4400.00	8.75	138.92	4391.70	-126.97	136.57	-126.97	186.47	132.91	1.11
4500.00	9.68	138.38	4490.40	-138.98	147.15	-138.98	202.41	133.37	0.94
4600.00	10.36	134.80	4588.88	-151.62	159.12	-151.62	219.79	133.62	0.94
4700.00	11.13	132.83	4687.12	-164.53	172.59	-164.53	238.45	133.63	0.83
4780.00	11.91	130.30	4765.51	-175.12	184.56	-175.12	254.41	133.50	1.16