Operator	Chevron		
Contractor	Nabors		
Rig	9AE		
Spud Date	3/3/2010		
Total Depth	11,000'		
Rig Release	3/13/2010		
Lease	Rocker Kinder		
Well	1		
County	Sublette		
State	Wyoming		
Elevation	6,800' GL		
Coordinates	Lat: 42.7 Long: -110.1		
Field	Wildcat		
Formation	Dakota		
Logging Co.	Schlumberger		
Logging Date	3/13/2010		
Log Type	Triple Combo		
Log Interval	10,900' - 2,000'		
Bit Size	8 3/4"		
Mud Type	Water		
Max Temp	200		
Max Rec Time	6 hrs		
Rmf	0.04 @ 200		
Rmc	0.05 @ 200		
Rm	0.06 @ 200		
Rw	0.03 @ 200		
Rmf Source	Calc		
Rmc Source	Calc		
Rm Source	Calc		
Rw Source	Calc		
Log Time	3 hrs		
Log Engineer	Bill Hall		
Log Witness	Rocky Mc Cullough		

Comments

Run second time on TCM and low MN separated and pad on all MD

Log Quality: Good, Log Interpretation: Good, Log Presentation: Good, Log Type: Triple Combo

Chevron will not accept as open hole and cased hole valid composite

Comments

Log Calculations Method: Automatic Interpretation Environment: Shale, Fresh Water

Zone	Top	Bottom	Thickness	Porosity	Sw	Vsh	Type

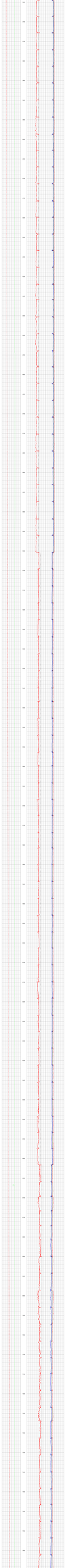
Shale Baseline

Zone	Top	Bottom	Thickness	Porosity	Sw	Vsh	Type

Water Window Sln - Rmc Water Logging Service

2" = 50'

Operator:	Chevron	Log Type:	Triple Combo		
Contractor:	Nabors	Log Interval:	10,900' - 2,000'		
Rig:	9AE	Log Date:	3/13/2010		
Lease:	Rocker Kinder	Log Time:	3 hrs		
Well:	1	Log Engineer:	Bill Hall		
County:	Sublette	Log Witness:	Rocky Mc Cullough		
State:	Wyoming				
Elevation:	6,800' GL	Rmf:	0.04 @ 200	Rmf Source:	Calc
Coordinates:	Lat: 42.7 Long: -110.1	Rmc:	0.05 @ 200	Rmc Source:	Calc
Field:	Wildcat	Rm:	0.06 @ 200	Rm Source:	Calc
Formation:	Dakota	Rw:	0.03 @ 200	Rw Source:	Calc



7700

-100 LSPD (ft/min) 100	0 NOMTHK (in) 0.5	5.5 NOM ID (in) 7.5
0 LTEN (lb) 3000	0 Minimum Rem Wall (in) 0.5	5.5 IDMNC (in) 7.5
		5.5 IDMXC (in) 7.5
		5.5 IDAVC (in) 7.5

Western Wireline

Min / Max Repeat Logging Section

5" = 100'

Database File gascopor35_60mac_1-25-16.db
Dataset Pathname MM_Repeat
Presentation Format mac60_mmc
Dataset Creation Thu Jan 28 08:36:48 2016
Charted by Depth in Feet scaled 1:240

-100 LSPD (ft/min) 100	0 NOMTHK (in) 0.5	5.5 NOM ID (in) 7.5
0 LTEN (lb) 3000	0 Minimum Rem Wall (in) 0.5	5.5 IDMNC (in) 7.5
		5.5 IDMXC (in) 7.5
		5.5 IDAVC (in) 7.5

400

450

500

550

600

-100 LSPD (ft/min) 100	0 NOMTHK (in) 0.5	5.5 NOM ID (in) 7.5
0 LTEN (lb) 3000	0 Minimum Rem Wall (in) 0.5	5.5 IDMNC (in) 7.5
		5.5 IDMXC (in) 7.5
		5.5 IDAVC (in) 7.5

Western Wireline

Multiarm Main Logging Section

5" = 100'

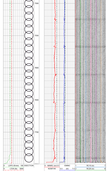
Database File gascopor35_60mac_1-25-16.db
Dataset Pathname Multiarm
Presentation Format mac60_mac
Dataset Creation Thu Jan 28 08:30:58 2016
Charted by Depth in Feet scaled 1:240

0 LSPD (ft/min) 100	XSECTION	0 MINRC (in) 0.5	IDMNC	1 RC10 (in) 7
0 LTEN (lb) 3000		NOMTHK	5.5 (in) 7.5	2 RC20 (in) 8
		0 (in) 0.5	CASEID	3 RC30 (in) 9
			5.5 (in) 7.5	4 RC40 (in) 10
			IDAVC	5 RC50 (in) 11
			5.5 (in) 7.5	6 RC60 (in) 12

Western Wireline

Multiarm Main Logging Section

5" = 100'

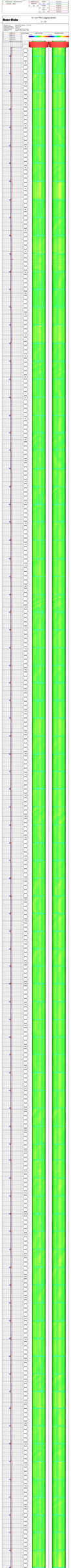


Baker Hughes

Hi-Tech Well Logging Services

F = 100

Company:	Petroleum Development Oman
Well:	Saih Rawl-1
Field:	Saih Rawl
Location:	Block 6
Country:	Sultanate of Oman
Date:	2-Jan-2010
Time:	00:00
Depth Reference:	Rotary Table
Elevation:	0 m
Log Interval:	1000 m
Log Speed:	1 m/min
Log Type:	Main
Run No:	1
Bit Size:	8.5 in
Mud Type:	Water Based
Mud Density:	1.05 g/cm3
Mud Viscosity:	40 s
Mud Resistivity:	0.2 Ohm.m
Max Temp:	100 °C



5.5	IDMXC (in)	7.5
5.5	IDMNC (in)	7.5
5.5	IDAVC (in)	7.5
5.5	CASED (in)	7.5

Cross Section

IMG Top Side

IMG Bottom Side

5.368 7

Western Wireline

Database File: gascopcr35_60mac_1-25-16.db
Dataset Pathname: Analysis
Presentation Format: mac_remwalls
Dataset Creation: Thu Jan 28 08:33:10 2016
Charted by: Depth in Feet scaled 1:240

Analysis

5" = 100'

0	MIN REM WALL (in)	0.5
0	NOMTHK (in)	0.5

ANALYSIS

<Joint> 14.4 ft

#183 RW=0.240 in
24% loss @ 20.2 ft

<Joint> 33.1, Len=18.8 ft

#182 RW=0.247 in
22% loss @ 34.2 ft

<Joint> 74.5, Len=41.4 ft

#181 RW=0.254 in
20% loss @ 80.5 ft

<Joint> 117.5, Len=43.0 ft

#180 RW=0.232 in
27% loss @ 121.1 ft

<Joint> 160.4, Len=42.9 ft

#179 RW=0.249 in
21% loss @ 201.6 ft

<Joint> 204.0, Len=43.6 ft

#178 RW=0.250 in
21% loss @ 206.5 ft

<Joint> 247.1, Len=43.1 ft

#177 RW=0.249 in
21% loss @ 271.6 ft

<Joint> 289.3, Len=42.3 ft

#176 RW=0.253 in
20% loss @ 293.1 ft

<Joint> 332.7, Len=43.4 ft

#175 RW=0.225 in
29% loss @ 339.6 ft

<Joint> 377.1, Len=44.4 ft

#174 RW=0.265 in
16% loss @ 409.9 ft

<Joint> 419.7, Len=42.6 ft

#173 RW=0.257 in
19% loss @ 422.0 ft

<Joint> 462.5, Len=42.8 ft

#172 RW=0.230 in
28% loss @ 503.9 ft

<Joint> 506.0, Len=43.4 ft

#171 RW=0.191 in
40% loss @ 519.3 ft

<Joint> 548.9, Len=42.9 ft

#170 RW=0.247 in
22% loss @ 554.1 ft

<Joint> 591.0, Len=42.1 ft

#169 RW=0.258 in
19% loss @ 592.1 ft

<Joint> 632.6, Len=41.6 ft

#168 RW=0.245 in
23% loss @ 673.8 ft

<Joint> 675.9, Len=43.3 ft

#167 RW=0.229 in
28% loss @ 678.3 ft

<Joint> 719.7, Len=43.8 ft

#166 RW=0.248 in
22% loss @ 733.5 ft

<Joint> 762.4, Len=42.7 ft

#165 RW=0.248 in
22% loss @ 768.9 ft

<Joint> 805.9, Len=43.5 ft

#164 RW=0.263 in
17% loss @ 846.9 ft

<Joint> 849.0, Len=43.1 ft

#163 RW=0.250 in
21% loss @ 890.4 ft

<Joint> 892.4, Len=43.4 ft

#162 RW=0.250 in
21% loss @ 895.8 ft

<Joint> 933.5, Len=41.2 ft

#161 RW=0.252 in
20% loss @ 947.5 ft

<Joint> 974.6, Len=41.1 ft

#160 RW=0.253 in
20% loss @ 987.8 ft

<Joint> 1018.9, Len=44.3 ft

#159 RW=0.243 in
23% loss @ 1036.7 ft

<Joint> 1062.4, Len=43.5 ft

#158 RW=0.250 in
21% loss @ 1068.2 ft

<Joint> 1105.0, Len=42.6 ft

#157 RW=0.245 in
23% loss @ 1107.8 ft

<Joint> 1146.6, Len=41.7 ft

#156 RW=0.245 in
23% loss @ 1188.2 ft

<Joint> 1190.3, Len=43.7 ft

#155 RW=0.248 in
22% loss @ 1192.8 ft

<Joint> 1234.5, Len=44.2 ft

#154 RW=0.241 in
24% loss @ 1266.0 ft

<Joint> 1277.6, Len=43.1 ft

#153 RW=0.248 in
22% loss @ 1280.0 ft

<Joint> 1320.4, Len=42.7 ft

#152 RW=0.245 in
23% loss @ 1344.8 ft

<Joint> 1362.1, Len=41.8 ft

#151 RW=0.252 in
20% loss @ 1401.5 ft

<Joint> 1404.3, Len=42.1 ft

#150 RW=0.251 in
21% loss @ 1413.0 ft

<Joint> 1447.4, Len=43.1 ft

#149 RW=0.248 in
22% loss @ 1449.2 ft

<Joint> 1489.8, Len=42.4 ft

#148 RW=0.232 in
27% loss @ 1490.9 ft

<Joint> 1531.1, Len=41.3 ft

#147 RW=0.254 in
20% loss @ 1570.2 ft

<Joint> 1572.9, Len=41.8 ft

#146 RW=0.249 in
22% loss @ 1613.2 ft

<Joint> 1615.2, Len=42.4 ft

#145 RW=0.243 in
23% loss @ 1625.9 ft

<Joint> 1658.0, Len=42.8 ft

#144 RW=0.251 in
21% loss @ 1693.4 ft

<Joint> 1701.2, Len=43.2 ft

#143 RW=0.252 in
21% loss @ 1705.4 ft

<Joint> 1742.6, Len=41.5 ft

#142 RW=0.252 in
21% loss @ 1744.6 ft

<Joint> 1784.6, Len=41.9 ft

#141 RW=0.251 in
21% loss @ 1825.1 ft

<Joint> 1827.4, Len=42.8 ft

#140 RW=0.247 in
22% loss @ 1828.4 ft

<Joint> 1871.0, Len=43.6 ft

#139 RW=0.236 in
26% loss @ 1872.0 ft

<Joint> 1913.9, Len=42.9 ft

#138 RW=0.253 in
20% loss @ 1916.4 ft

<Joint> 1955.5, Len=41.6 ft

#137 RW=0.248 in
22% loss @ 1984.3 ft

<Joint> 1998.1, Len=42.6 ft

#136 RW=0.249 in
21% loss @ 2002.3 ft

<Joint> 2040.4, Len=42.4 ft

#135 RW=0.238 in
25% loss @ 2056.3 ft

<Joint> 2082.3, Len=41.9 ft

#134 RW=0.244 in
23% loss @ 2084.8 ft

<Joint> 2124.6, Len=42.2 ft

#133 RW=0.250 in
21% loss @ 2147.7 ft

<Joint> 2167.3, Len=42.7 ft

#132 RW=0.239 in
25% loss @ 2168.3 ft

<Joint> 2207.8, Len=40.5 ft

#131 RW=0.248 in
22% loss @ 2236.3 ft

<Joint> 2250.3, Len=42.5 ft

#130 RW=0.244 in
23% loss @ 2290.9 ft

<Joint> 2293.0, Len=42.7 ft

#129 RW=0.244 in
23% loss @ 2333.5 ft

<Joint> 2335.5, Len=42.5 ft

#128 RW=0.251 in
21% loss @ 2337.6 ft

<Joint> 2377.9, Len=42.4 ft

#127 RW=0.262 in
17% loss @ 2396.1 ft

<Joint> 2419.8, Len=41.9 ft

#126 RW=0.253 in
20% loss @ 2422.5 ft

<Joint> 2462.7, Len=42.9 ft

#125 RW=0.235 in
26% loss @ 2464.9 ft

<Joint> 2505.2, Len=42.5 ft

#124 RW=0.237 in
25% loss @ 2506.2 ft

<Joint> 2547.6, Len=42.4 ft

#123 RW=0.245 in
23% loss @ 2576.0 ft

<Joint> 2590.9, Len=43.3 ft

#122 RW=0.238 in
25% loss @ 2591.9 ft

<Joint> 2633.0, Len=42.2 ft

#121 RW=0.247 in
22% loss @ 2636.6 ft

<Joint> 2671.8, Len=38.8 ft

#120 RW=0.232 in
27% loss @ 2698.1 ft

<Joint> 2714.8, Len=43.0 ft

#119 RW=0.238 in
25% loss @ 2734.3 ft

<Joint> 2757.0, Len=42.3 ft

#118 RW=0.254 in
20% loss @ 2761.1 ft

<Joint> 2800.0, Len=43.0 ft

#117 RW=0.251 in
21% loss @ 2813.8 ft

<Joint> 2841.5, Len=41.4 ft

#116 RW=0.225 in
29% loss @ 2842.6 ft

<Joint> 2885.0, Len=43.5 ft

#115 RW=0.237 in
25% loss @ 2901.0 ft

<Joint> 2927.9, Len=42.9 ft

#114 RW=0.234 in
26% loss @ 2929.0 ft

<Joint> 2970.2, Len=42.4 ft

#113 RW=0.241 in
24% loss @ 3002.0 ft

<Joint> 3012.9, Len=42.7 ft

#112 RW=0.247 in
22% loss @ 3014.0 ft

<Joint> 3055.5, Len=42.6 ft

#111 RW=0.245 in
23% loss @ 3062.9 ft

<Joint> 3097.7, Len=42.2 ft

#110 RW=0.251 in
21% loss @ 3102.8 ft

<Joint> 3140.4, Len=42.7 ft

#109 RW=0.251 in
21% loss @ 3148.4 ft

<Joint> 3182.8, Len=42.3 ft

#108 RW=0.242 in
24% loss @ 3191.8 ft

<Joint> 3224.5, Len=41.7 ft

#107 RW=0.232 in
27% loss @ 3261.2 ft

<Joint> 3264.5, Len=40.0 ft

#106 RW=0.233 in
26% loss @ 3266.5 ft

<Joint> 3306.6, Len=42.2 ft

#105 RW=0.242 in
24% loss @ 3314.1 ft

<Joint> 3349.1, Len=42.4 ft

#104 RW=0.243 in
23% loss @ 3371.5 ft

<Joint> 3391.3, Len=42.3 ft

#103 RW=0.228 in
28% loss @ 3393.2 ft

<Joint> 3434.8, Len=43.5 ft

#102 RW=0.257 in
19% loss @ 3449.0 ft

<Joint> 3477.4, Len=42.5 ft

#101 RW=0.239 in
25% loss @ 3517.9 ft

<Joint> 3519.8, Len=42.5 ft

#100 RW=0.247 in
22% loss @ 3521.8 ft

<Joint> 3561.5, Len=41.7 ft

#99 RW=0.241 in
24% loss @ 3563.4 ft

<Joint> 3604.4, Len=42.9 ft

#98 RW=0.227 in
29% loss @ 3642.8 ft

<Joint> 3645.0, Len=40.7 ft

#97 RW=0.244 in
23% loss @ 3683.9 ft

<Joint> 3686.0, Len=41.0 ft

#96 RW=0.253 in
20% loss @ 3688.3 ft

<Joint> 3728.2, Len=42.2 ft

#95 RW=0.245 in
23% loss @ 3730.1 ft

<Joint> 3771.3, Len=43.2 ft

#94 RW=0.248 in
22% loss @ 3808.6 ft

<Joint> 3813.8, Len=42.4 ft

#93 RW=0.254 in
20% loss @ 3837.0 ft

<Joint> 3855.9, Len=42.2 ft

#92 RW=0.243 in
23% loss @ 3897.4 ft

<Joint> 3899.5, Len=43.5 ft

#91 RW=0.234 in
26% loss @ 3941.0 ft

<Joint> 3943.1, Len=43.7 ft

#90 RW=0.224 in
29% loss @ 3977.2 ft

<Joint> 3987.0, Len=43.9 ft

#89 RW=0.234 in
26% loss @ 3989.1 ft

<Joint> 4027.8, Len=40.8 ft

#88 RW=0.247 in
22% loss @ 4064.8 ft

<Joint> 4070.3, Len=42.4 ft

#87 RW=0.229 in
28% loss @ 4111.0 ft

<Joint> 4113.1, Len=42.8 ft

#86 RW=0.239 in
25% loss @ 4115.9 ft

<Joint> 4157.1, Len=44.0 ft

#85 RW=0.236 in
26% loss @ 4196.5 ft

<Joint> 4198.8, Len=41.7 ft

#84 RW=0.239 in
25% loss @ 4233.1 ft

<Joint> 4241.4, Len=42.6 ft

#83 RW=0.247 in
22% loss @ 4280.9 ft

<Joint> 4283.2, Len=41.8 ft

#82 RW=0.238 in
25% loss @ 4310.7 ft

<Joint> 4326.1, Len=43.0 ft

#81 RW=0.244 in
23% loss @ 4357.0 ft

<Joint> 4369.6, Len=43.5 ft

#80 RW=0.235 in
26% loss @ 4397.6 ft

<Joint> 4409.1, Len=39.5 ft

#79 RW=0.223 in
30% loss @ 4450.6 ft

<Joint> 4452.8, Len=43.7 ft

#78 RW=0.236 in
26% loss @ 4457.4 ft

<Joint> 4496.1, Len=43.3 ft

#77 RW=0.228 in
28% loss @ 4521.6 ft

<Joint> 4539.7, Len=43.6 ft

#76 RW=0.257 in
19% loss @ 4551.9 ft

<Joint> 4580.4, Len=40.7 ft

#75 RW=0.245 in
23% loss @ 4603.8 ft

<Joint> 4622.9, Len=42.5 ft

#74 RW=0.247 in
22% loss @ 4650.9 ft

<Joint> 4665.4, Len=42.5 ft

#73 RW=0.244 in
23% loss @ 4704.3 ft

<Joint> 4708.5, Len=43.1 ft

#72 RW=0.237 in
25% loss @ 4710.3 ft

<Joint> 4752.0, Len=43.4 ft

#71 RW=0.235 in
26% loss @ 4787.0 ft

<Joint> 4795.0, Len=43.0 ft

#70 RW=0.226 in
29% loss @ 4796.6 ft

<Joint> 4838.2, Len=43.3 ft

#69 RW=0.246 in
22% loss @ 4876.4 ft

<Joint> 4880.7, Len=42.5 ft

#68 RW=0.243 in
23% loss @ 4894.3 ft

<Joint> 4924.1, Len=43.4 ft

#67 RW=0.235 in
26% loss @ 4966.4 ft

<Joint> 4968.2, Len=44.1 ft

#66 RW=0.236 in
26% loss @ 4985.1 ft

<Joint> 5010.0, Len=41.8 ft

#65 RW=0.229 in
28% loss @ 5052.0 ft

<Joint> 5054.1, Len=44.1 ft

#64 RW=0.314 in
13% loss @ 5079.4 ft

<Joint> 5095.5, Len=41.4 ft

#63 RW=0.284 in
21% loss @ 5096.5 ft

<Joint> 5139.4, Len=44.0 ft

#62 RW=0.307 in
15% loss @ 5153.1 ft

<Joint> 5182.4, Len=42.9 ft

#61 RW=0.305 in
16% loss @ 5183.4 ft

<Joint> 5224.8, Len=42.4 ft

#60 RW=0.282 in
22% loss @ 5225.9 ft

<Joint> 5268.9, Len=44.1 ft

#59 RW=0.291 in
20% loss @ 5269.9 ft

<Joint> 5312.3, Len=43.4 ft

#58 RW=0.295 in
19% loss @ 5313.3 ft

<Joint> 5355.5, Len=43.2 ft

#57 RW=0.298 in
18% loss @ 5397.6 ft

<Joint> 5399.3, Len=43.9 ft

#56 RW=0.297 in
18% loss @ 5400.3 ft

<Joint> 5433.3, Len=34.0 ft

#55 RW=0.288 in
20% loss @ 5434.3 ft

<Joint> 5476.6, Len=43.3 ft

#54 RW=0.286 in
21% loss @ 5477.6 ft

<Joint> 5520.1, Len=43.5 ft

#53 RW=0.300 in
17% loss @ 5521.5 ft

<Joint> 5562.8, Len=42.7 ft

#52 RW=0.289 in
20% loss @ 5563.8 ft

<Joint> 5598.1, Len=35.2 ft

#51 RW=0.303 in
16% loss @ 5638.3 ft

<Joint> 5641.5, Len=43.5 ft

#50 RW=0.305 in
16% loss @ 5652.5 ft

<Joint> 5684.7, Len=43.2 ft

#49 RW=0.299 in
17% loss @ 5706.3 ft

<Joint> 5725.3, Len=40.6 ft

#48 RW=0.303 in
16% loss @ 5766.8 ft

<Joint> 5768.7, Len=43.4 ft

#47 RW=0.308 in
15% loss @ 5785.4 ft

<Joint> 5807.0, Len=38.2 ft

#46 RW=0.279 in
23% loss @ 5808.0 ft

<Joint> 5850.4, Len=43.4 ft

#45 RW=0.303 in
16% loss @ 5851.4 ft

<Joint> 5892.4, Len=42.0 ft

#44 RW=0.296 in
18% loss @ 5893.4 ft

<Joint> 5936.7, Len=44.3 ft

#43 RW=0.309 in
15% loss @ 5977.9 ft

<Joint> 5979.3, Len=42.6 ft

#42 RW=0.293 in
19% loss @ 6020.7 ft

<Joint> 6022.0, Len=42.7 ft

#41 RW=0.310 in
14% loss @ 6023.0 ft

<Joint> 6063.4, Len=41.4 ft

#40 RW=0.303 in
16% loss @ 6104.5 ft

<Joint> 6105.6, Len=42.2 ft

#39 RW=0.298 in
18% loss @ 6140.9 ft

<Joint> 6149.4, Len=43.7 ft

#38 RW=0.277 in
23% loss @ 6159.4 ft

<Joint> 6190.3, Len=41.0 ft

#37 RW=0.286 in
21% loss @ 6191.3 ft

<Joint> 6234.0, Len=43.6 ft

#36 RW=0.298 in
18% loss @ 6250.3 ft

<Joint> 6276.0, Len=42.0 ft

#35 RW=0.313 in
14% loss @ 6304.0 ft

<Joint> 6318.1, Len=42.2 ft

#34 RW=0.302 in
17% loss @ 6319.5 ft

<Joint> 6361.9, Len=43.8 ft

#33 RW=0.302 in
17% loss @ 6389.0 ft

<Joint> 6405.6, Len=43.8 ft

#32 RW=0.301 in
17% loss @ 6427.5 ft

<Joint> 6449.2, Len=43.5 ft

#31 RW=0.302 in
17% loss @ 6478.3 ft

<Joint> 6492.4, Len=43.3 ft

#30 RW=0.290 in
20% loss @ 6495.8 ft

<Joint> 6533.5, Len=41.1 ft

#29 RW=0.285 in
21% loss @ 6571.1 ft

<Joint> 6573.8, Len=40.3 ft

#28 RW=0.254 in
30% loss @ 6575.0 ft

<Joint> 6616.3, Len=42.5 ft

#27 RW=0.336 in
18% loss @ 6638.5 ft

<Joint> 6658.9, Len=42.6 ft

#26 RW=0.320 in
22% loss @ 6684.8 ft

<Joint> 6696.4, Len=37.5 ft

#25 RW=0.295 in
28% loss @ 6712.6 ft

<Joint> 6733.6, Len=37.3 ft

#24 RW=0.322 in
21% loss @ 6736.0 ft

<Joint> 6771.2, Len=37.6 ft

#23 RW=0.333 in
18% loss @ 6803.6 ft

<Joint> 6807.5, Len=36.3 ft

#22 RW=0.339 in
17% loss @ 6841.5 ft

<Joint> 6849.4, Len=41.9 ft

#21 RW=0.316 in
22% loss @ 6865.8 ft

<Joint> 6893.3, Len=43.9 ft

#20 RW=0.321 in
21% loss @ 6928.5 ft

<Joint> 6935.6, Len=42.3 ft

#19 RW=0.289 in
29% loss @ 6946.8 ft

<Joint> 6979.5, Len=43.9 ft

#18 RW=0.290 in
29% loss @ 6995.5 ft

<Joint> 7022.7, Len=43.2 ft

#17 RW=0.324 in
21% loss @ 7032.2 ft

<Joint> 7066.0, Len=43.3 ft

#16 RW=0.309 in
24% loss @ 7068.0 ft

<Joint> 7107.6, Len=41.6 ft

#15 RW=0.340 in
17% loss @ 7121.9 ft

<Joint> 7147.7, Len=40.1 ft

#14 RW=0.328 in
20% loss @ 7186.1 ft

<Joint> 7191.3, Len=43.6 ft

#13 RW=0.332 in
19% loss @ 7196.3 ft

<Joint> 7234.3, Len=43.0 ft

#12 RW=0.308 in
25% loss @ 7254.8 ft

<Joint> 7270.2, Len=36.0 ft

#11 RW=0.350 in
14% loss @ 7292.3 ft

<Joint> 7312.5, Len=42.3 ft

#10 RW=0.325 in
20% loss @ 7315.1 ft

<Joint> 7356.0, Len=43.5 ft

#9 RW=0.320 in
21% loss @ 7363.0 ft

<Joint> 7399.1, Len=43.1 ft

#8 RW=0.323 in
21% loss @ 7405.1 ft

<Joint> 7442.3, Len=43.1 ft

#7 RW=0.320 in
21% loss @ 7444.3 ft

<Joint> 7482.1, Len=39.8 ft

#6 RW=0.331 in
19% loss @ 7524.1 ft

<Joint> 7525.4, Len=43.3 ft

#5 RW=0.316 in
23% loss @ 7566.5 ft

<Joint> 7567.8, Len=42.4 ft

#4 RW=0.319 in
22% loss @ 7581.3 ft

<Joint> 7610.7, Len=42.9 ft

#3 RW=0.307 in
25% loss @ 7641.3 ft

<Joint> 7653.0, Len=42.4 ft

#2 RW=0.296 in
27% loss @ 7654.5 ft

<Joint> 7697.2, Len=44.1 ft

#1 RW=0.278 in
32% loss @ 7725.4 ft

<Joint> 7740.3, Len=43.1 ft

ANALYSIS

Company:
Well:

Western Wireline

Joint			Remaining Wall		
No.	Depth	Length	0.000	0.500	in
183	14.4	18.8			0.240
	33.1	41.4			0.247
	74.5	43.0			0.254
	117.5	42.9			0.232
	160.4	43.6			0.249
	204.0	43.1			0.250
	247.1	42.3			0.249

Joint			Remaining Wall		
No.	Depth	Length	0.000	0.500	in
	1062.4	42.6			0.250
	1105.0	41.7			0.245
	1146.6	43.7			0.245
	1190.3	44.2			0.248
	1234.5	43.1			0.241
	1277.6	42.7			0.248
	1320.4	41.8			0.245

No.	Depth	Length	0.000 0.500	in
	289.3	43.4		0.253
	332.7	44.4		0.225
	377.1	42.6		0.265
	419.7	42.8		0.257
	462.5	43.4		0.230
	506.0	42.9		0.191
	548.9	42.1		0.247
	591.0	41.6		0.258
	632.6	43.3		0.245
	675.9	43.8		0.229
	719.7	42.7		0.248
	762.4	43.5		0.248
	805.9	43.1		0.263
	849.0	43.4		0.250
	892.4	41.2		0.250
	933.5	41.1		0.252
	974.6	44.3		0.253
	1018.9	43.5		0.243

No.	Depth	Length	0.000 0.500	in
	1362.1	42.1		0.252
	1404.3	43.1		0.251
	1447.4	42.4		0.248
	1489.8	41.3		0.233
	1531.1	41.8		0.254
	1572.9	42.4		0.249
	1615.2	42.8		0.243
	1658.0	43.2		0.251
	1701.2	41.6		0.252
	1742.8	41.8		0.252
	1784.6	42.8		0.251
	1827.4	43.6		0.247
	1871.0	42.9		0.236
	1913.9	41.6		0.253
	1955.5	42.6		0.248
	1998.1	42.4		0.249
	2040.4	41.9		0.238
	2082.3	42.2		0.244

Log Date:

Sheet: 1 of 4

Company:
Well:

Western Wireline

Joint			Remaining Wall	
No.	Depth	Length	0.000 0.500	in
133	2124.6	42.7		0.250
	2167.3	40.5		0.239
	2207.8	42.5		0.249
	2250.3	42.7		0.244
	2293.0	42.5		0.244
	2335.5	42.4		0.251
	2377.9	41.9		0.262
	2419.8	42.9		0.253
	2462.7	42.5		0.235
	2505.2	42.4		0.237
	2547.6	43.3		0.245
	2590.9	42.2		0.238
	2633.0	38.8		0.247
	2671.8	43.0		0.232
	2714.8	42.3		0.238
	2757.0	43.0		0.254
	2800.0	41.4		0.251
	2841.5	43.5		0.225
	2885.0	42.9		0.237
	2927.9	42.4		0.234
	2970.2	42.7		0.241
	3012.9	42.6		0.247
	3055.5	42.2		0.245
	3097.7	42.7		0.251
	3140.4	42.3		0.251

Joint			Remaining Wall	
No.	Depth	Length	0.000 0.500	in
	3182.8	41.7		0.242
	3224.5	40.0		0.232
	3264.5	42.2		0.233
	3306.6	42.4		0.242
	3349.1	42.3		0.243
	3391.3	43.5		0.228
	3434.8	42.5		0.257
	3477.4	42.5		0.239
	3519.8	41.7		0.247
	3561.5	42.9		0.241
	3604.4	40.7		0.227
	3645.0	41.0		0.244
	3686.0	42.2		0.253
	3728.2	43.2		0.245
	3771.3	42.4		0.248
	3813.8	42.2		0.254
	3855.9	43.5		0.243
	3899.5	43.7		0.234
	3943.1	43.9		0.224
	3987.0	40.8		0.234
	4027.8	42.4		0.247
	4070.3	42.8		0.229
	4113.1	44.0		0.239
	4157.1	41.7		0.236
	4198.8	42.6		0.239

Log Date:

Sheet: 2 of 4

Company:
Well:

Western Wireline

Joint			Remaining Wall	
No.	Depth	Length	0.000 0.500	in
83	4241.4	41.8		0.247
	4283.2	43.0		0.238
	4326.1	43.5		0.244
	4369.6	39.5		0.235
	4409.1	43.7		0.223
	4452.8	43.3		0.236
	4496.1	43.6		0.228
	4539.7	40.7		0.257
	4580.4	42.5		0.245
	4622.9	42.5		0.247
	4665.4	43.1		0.244
	4708.5	43.4		0.237
	4752.0	43.0		0.235
	4795.0	43.3		0.226
	4838.2	42.5		0.246
	4880.7	43.4		0.243
	4924.1	44.1		0.235
	4968.2	41.8		0.236
	5010.0	44.1		0.229
	5054.1	41.4		0.314
	5095.5	44.0		0.284
	5139.4	42.9		0.307
	5182.4	42.4		0.305
	5224.8	44.1		0.282
	5268.9	43.4		0.291

Joint			Remaining Wall	
No.	Depth	Length	0.000 0.500	in
	5312.3	43.2		0.295
	5355.5	43.9		0.298
	5399.3	34.0		0.297
	5433.3	43.3		0.288
	5476.6	43.5		0.286
	5520.1	42.7		0.300
	5562.8	35.2		0.289
	5598.1	43.5		0.303
	5641.5	43.2		0.305
	5684.7	40.6		0.299
	5725.3	43.4		0.303
	5768.7	38.2		0.308
	5807.0	43.4		0.279
	5850.4	42.0		0.303
	5892.4	44.3		0.296
	5936.7	42.6		0.309
	5979.3	42.7		0.293
	6022.0	41.4		0.310
	6063.4	42.2		0.303
	6105.6	43.7		0.298
	6149.4	41.0		0.277
	6190.3	43.6		0.286
	6234.0	42.0		0.298
	6276.0	42.2		0.313
	6318.1	43.8		0.302

Log Date:

Sheet: 3 of 4

Company:
Well:

Western Wireline

Joint			Remaining Wall	
No.	Depth	Length	0.000 0.500	in
33	6361.9	43.8		0.302
	6405.6	43.5		0.301
	6449.2	43.3		0.302
	6492.4	41.1		0.290
	6533.5	40.3		0.285
	6573.8	42.5		0.254
	6616.3	42.6		0.336
	6658.9	37.5		0.320
	6696.4	37.3		0.295
	6733.6	37.6		0.322
	6771.2	36.3		0.333
	6807.5	41.9		0.339
	6849.4	43.9		0.316
	6893.3	42.3		0.321
	6935.6	43.9		0.289
	6979.5	43.2		0.290
	7022.7	43.3		0.324
	7066.0	41.6		0.309
	7107.6	40.1		0.340
	7147.7	43.6		0.328
	7191.3	43.0		0.332
	7234.3	36.0		0.308
	7270.2	42.3		0.350
	7312.5	43.5		0.325
	7356.0	43.1		0.320

Joint			Remaining Wall	
No.	Depth	Length	0.000 0.500	in
	7399.1	43.1		0.323
	7442.3	39.8		0.320
	7482.1	43.3		0.331
	7525.4	42.4		0.316
	7567.8	42.9		0.319
	7610.7	42.4		0.307
	7653.0	44.1		0.296
	7697.2	43.1		0.278
	7740.3	0.0		0.000

Log Date:

Sheet: 4 of 4

Calibration Report

Database File gascopor35_60mac_1-25-16.db
Dataset Pathname MM_Main
Dataset Creation Thu Jan 28 08:28:00 2016

60 Arm Multi Sensor Caliper Calibration Report

Serial Number: 111249
Tool Model: 60_INCL
Performed: Wed Jan 27 20:38:51 2016

Ref ID:	5.00	6.00	7.00	8.00	9.00	10.00	
Arm1	2.72	3.20	3.70	4.19	4.68	5.17	
Arm2	2.57	3.07	3.58	4.09	4.61	5.08	
Arm3	2.53	3.02	3.54	4.03	4.53	4.99	
Arm4	2.61	3.13	3.66	4.18	4.69	5.16	
Arm5	2.42	2.92	3.44	3.95	4.48	4.96	
Arm6	2.51	3.01	3.53	4.04	4.55	5.01	
Arm7	2.48	2.97	3.48	3.98	4.51	5.00	
Arm8	2.33	2.83	3.32	3.80	4.30	4.78	
Arm9	2.41	2.90	3.41	3.90	4.42	4.91	
Arm10	2.65	3.14	3.64	4.13	4.65	5.14	
Arm11	2.62	3.12	3.64	4.14	4.66	5.11	
Arm12	2.37	2.88	3.40	3.92	4.44	4.92	
Arm13	2.58	3.10	3.63	4.16	4.68	5.12	
Arm14	2.58	3.10	3.62	4.13	4.63	5.09	
Arm15	2.47	2.96	3.45	3.94	4.44	4.91	
Arm16	2.60	3.11	3.61	4.12	4.62	5.08	
Arm17	2.46	2.94	3.44	3.93	4.42	4.87	
Arm18	2.12	2.69	3.27	3.85	4.42	4.97	
Arm19	2.36	2.88	3.41	3.93	4.46	4.95	
Arm20	2.32	2.83	3.34	3.84	4.35	4.84	
Arm21	2.30	2.80	3.30	3.80	4.31	4.82	
Arm22	2.26	1.79	1.30	0.80	0.31	-0.18	*
Arm23	2.44	2.93	3.44	3.94	4.44	4.91	
Arm24	2.57	2.07	1.56	1.05	0.54	-0.01	*
Arm25	2.43	2.94	3.45	3.96	4.46	4.94	
Arm26	2.19	1.71	1.23	0.76	0.29	-0.20	*
Arm27	2.75	3.25	3.74	4.23	4.70	5.14	
Arm28	2.65	2.14	1.64	1.14	0.62	0.08	*
Arm29	2.16	2.68	3.19	3.71	4.22	4.74	
Arm30	2.65	2.15	1.63	1.11	0.58	0.07	*

* Bad

Ref ID:	5.00	6.00	7.00	8.00	9.00	10.00
Arm31	2.49	2.99	3.49	3.99	4.48	4.95
Arm32	2.39	2.91	3.42	3.92	4.41	4.91
Arm33	2.62	3.10	3.58	4.06	4.53	4.99
Arm34	2.49	3.02	3.54	4.07	4.56	5.04
Arm35	2.58	3.09	3.59	4.09	4.57	5.05
Arm36	2.79	3.28	3.76	4.24	4.69	5.13
Arm37	2.86	3.35	3.83	4.34	4.84	5.32
Arm38	2.36	2.87	3.38	3.91	4.39	4.87
Arm39	2.47	2.97	3.47	3.97	4.45	4.91
Arm40	2.27	2.84	3.41	3.98	4.53	5.06
Arm41	2.57	3.07	3.56	4.07	4.56	5.04
Arm42	2.57	3.07	3.57	4.08	4.55	5.00
Arm43	2.62	3.11	3.61	4.12	4.56	5.00
Arm44	2.45	2.96	3.47	4.00	4.50	4.97
Arm45	2.49	3.03	3.57	4.10	4.62	5.10
Arm46	2.53	3.07	3.61	4.15	4.66	5.14
Arm47	2.38	2.90	3.40	3.92	4.41	4.91
Arm48	2.72	3.24	3.76	4.29	4.79	5.24
Arm49	2.77	3.27	3.76	4.25	4.72	5.17
Arm50	2.68	3.17	3.65	4.14	4.62	5.09
Arm51	2.56	3.08	3.61	4.14	4.66	5.16
Arm52	2.66	3.17	3.67	4.18	4.69	5.18
Arm53	2.67	3.19	3.71	4.23	4.74	5.22
Arm54	2.59	3.05	3.51	3.99	4.46	4.91
Arm55	2.46	2.98	3.51	4.05	4.56	5.04
Arm56	2.61	3.14	3.67	4.19	4.71	5.17
Arm57	2.48	3.00	3.53	4.04	4.56	5.05
Arm58	2.49	2.98	3.49	4.01	4.52	4.97
Arm59	2.72	3.23	3.74	4.25	4.73	5.15
Arm60	2.55	3.05	3.55	4.05	4.56	5.06

* Bad

PROBE verifications Calibration Report

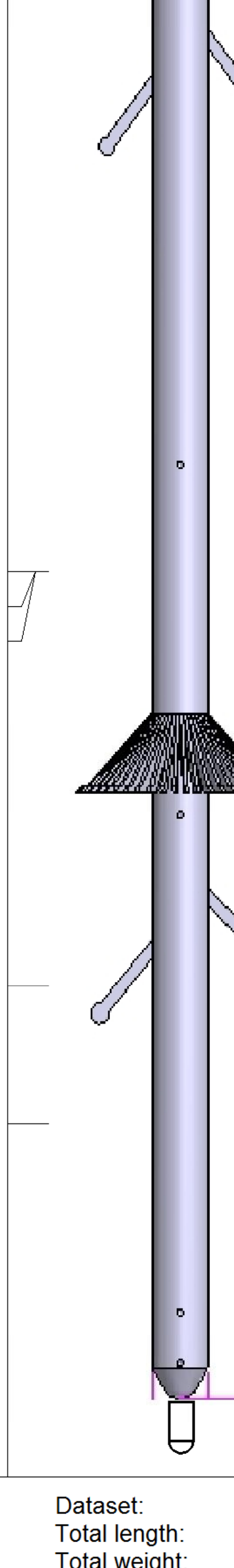
	Pre Verification	Post Verification	Casing Check	
Performed:	Wed Jan 27 13:26:25 2016			
Ref ID:	10.00	0.00	0.00	in
Min.	10.00	0.00	0.00	in
Max.	10.00	0.00	0.00	in
Avg.	10.00	0.00	0.00	in
Dia1	10.00	0.00	0.00	in
Dia2	10.00	0.00	0.00	in
Dia3	10.00	0.00	0.00	in
Dia4	10.00	0.00	0.00	in
Dia5	10.00	0.00	0.00	in
Dia6	10.00	0.00	0.00	in
Dia7	10.00	0.00	0.00	in
Dia8	10.00	0.00	0.00	in
Dia9	10.00	0.00	0.00	in
Dia10	10.00	0.00	0.00	in
Dia11	10.00	0.00	0.00	in
Dia12	10.00	0.00	0.00	in
Dia13	10.00	0.00	0.00	in
Dia14	10.00	0.00	0.00	in
Dia15	10.00	0.00	0.00	in
Dia16	10.00	0.00	0.00	in
Dia17	10.00	0.00	0.00	in
Dia18	10.00	0.00	0.00	in
Dia19	10.00	0.00	0.00	in
Dia20	10.00	0.00	0.00	in
Dia21	10.00	0.00	0.00	in
Dia22	10.00	0.00	0.00	in
Dia23	10.00	0.00	0.00	in
Dia24	10.00	0.00	0.00	in
Dia25	10.00	0.00	0.00	in
Dia26	10.00	0.00	0.00	in
Dia27	10.00	0.00	0.00	in
Dia28	10.00	0.00	0.00	in
Dia29	10.00	0.00	0.00	in
Dia30	10.00	0.00	0.00	in

Inclinometer Calibration Report

Performed: (Not Performed)

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	0.00	1.00	0.00	1.00	gee
Y Accelerometer	0.00	1.00	0.00	1.00	gee
Z Accelerometer	0.00	1.00	0.00	1.00	gee

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-STNDRD Standard Cable Head	1.00	1.44	5.00
ACCZ	5.33					
ACCY	5.33					
ACCX	5.33		Probe_MFCAL-60_INCL (111249)	9.00	3.62	85.00
ETEMP	2.83					
Meas	2.00					
			BNS-1.687	0.33	1.69	1.00



Dataset: gascopor35_60mac_1-25-16.db: field/well/run1/MM_Main
Total length: 10.33 ft
Total weight: 91.00 lb
O.D.: 3.62 in

Western Wireline

Company Southern California Gas Company
Well Porter35
Field Aliso Canyon
County Los Angeles
State California
Country U.S.A