



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1105898
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
-----------------------------------	-----------------	---

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1105898

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	EnCana Oil & Gas (USA) Inc.
Well Name	Nattier 16H 2
Doc ID	1105898

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	6926-7187	52,580# prop & 104 BBLs HCL	6926-7187
4	6536-6862	50,760# prop & 127 BBLs HCL	6536-6862
4	6146-6472	51,010# prop & 103 BBLs HCL	6146-6472
4	5756-6082	46,000# prop & 103 BBLs HCL	5756-6082
4	5366-5692	50,230# prop & 119 BBLs HCL	5366-5692
4	4976-5302	50,040# prop & 140 BBLs HCL	4976-5302
4	4586-4912	50,010# prop & 112 BBLs HCL	4586-4912
4	4196-4522	49,650# prop & 103 BBLs HCL	4196-4522
4	3806-4132	51,020# prop & 102 BBLs HCL	3806-4132
4	3416-3472	50,290# prop & 115 BBLs HCL	3416-3472

Form	ACO1 - Well Completion
Operator	EnCana Oil & Gas (USA) Inc.
Well Name	Nattier 16H 2
Doc ID	1105898

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Conductor	20	16	46	70	Grout	56	
Surface	12.250	9.625	23.20	278	Standard	290	2% CaCl
Intermediate	8.750	7	26.00	3400	Standard	220	.25 Poly flake
Production	6.125	4.50	11.60	7352	Standard	395	.25 Poly flake

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

December 27, 2012

Sharon Cook
EnCana Oil & Gas (USA) Inc.
5851 LEGACY CIRCLE
PLANO, TX 75024

Re: ACO1
API 15-079-20693-01-00
Nattier 16H 2
SE/4 Sec.16-24S-02E
Harvey County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Sharon Cook

Customer Encana Nat Creation Date 8/31/2012
 Project Harvey Co. Profile Type
 Field Harvey Co. Your Ref
 Structure Sec 16-T24 Job Numbe
 Wellhead Nattier 16t Kelly Bushii 1452.5
 Profile Wellbore # Print Date 09/11/2012

MD (ft)	Incl. Deg.	Azim. Deg.	Sub-Sea (ft)	TVD (ft)	Local N Cor (ft)	Local E Cor (ft)	Global N Cc (ft)	Global E Cc (ft)	Dogleg (°/100ft)	Vertical Section (ft)
0	0	0	0	-1452.5	0	0	472092	2370694	0	0
310	0.28	175.77		-1142.501	-0.755	0.056	472091.2	2370694	0.09	-0.76
375	0.26	186.95		-1077.502	-1.06	0.05	472090.9	2370694	0.087	-1.06
420	0.27	191.48		-1032.502	-1.265	0.016	472090.7	2370694	0.052	-1.27
465	0.17	224.12		-987.503	-1.417	-0.051	472090.6	2370694	0.348	-1.42
510	0.2	163.24		-942.503	-1.54	-0.075	472090.5	2370694	0.421	-1.54
555	0.26	177.74		-897.503	-1.718	-0.048	472090.3	2370694	0.185	-1.72
600	0.32	167.54		-852.504	-1.942	-0.017	472090.1	2370694	0.175	-1.94
645	0.26	177.72		-807.504	-2.167	0.014	472089.8	2370694	0.175	-2.17
689	0.28	162.42		-763.505	-2.369	0.05	472089.6	2370694	0.169	-2.37
734	0.15	182.82		-718.505	-2.533	0.081	472089.5	2370694	0.331	-2.53
779	0.2	150.88		-673.505	-2.66	0.116	472089.3	2370694	0.239	-2.66
823	0.3	151.18		-629.506	-2.828	0.209	472089.2	2370694	0.227	-2.83
868	0.23	148.41		-584.506	-3.009	0.313	472089	2370694	0.158	-3.01
913	0.17	169.82		-539.507	-3.151	0.372	472088.8	2370694	0.211	-3.16
958	0.17	194.59		-494.507	-3.282	0.367	472088.7	2370694	0.162	-3.29
1003	0.12	155.99		-449.507	-3.389	0.369	472088.6	2370694	0.237	-3.4
1048	0.17	164.24		-404.507	-3.497	0.407	472088.5	2370694	0.12	-3.5
1093	0.05	150.78		-359.507	-3.578	0.434	472088.4	2370694	0.271	-3.58
1137	0.08	109.6		-315.507	-3.605	0.473	472088.4	2370694	0.122	-3.61
1182	0	5.17		-270.507	-3.615	0.502	472088.4	2370695	0.178	-3.62
1227	0.1	104.52		-225.507	-3.625	0.54	472088.4	2370695	0.222	-3.63
1272	0.15	38.08		-180.507	-3.589	0.615	472088.4	2370695	0.318	-3.6
1317	0.08	19.77		-135.507	-3.513	0.662	472088.5	2370695	0.174	-3.52

1361	0.07	0.59	-91.507	1360.993	-3.457	0.672	472088.5	2370695	0.061	-3.47
1406	0.13	42.47	-46.508	1405.992	-3.392	0.707	472088.6	2370695	0.202	-3.4
1451	0.14	14.31	-1.508	1450.992	-3.301	0.755	472088.7	2370695	0.148	-3.31
1482	0.18	20.64	29.492	1481.992	-3.219	0.782	472088.8	2370695	0.141	-3.23
1512	0.18	19.99	59.492	1511.992	-3.13	0.814	472088.9	2370695	0.007	-3.14
1543	0.21	15.32	90.492	1542.992	-3.03	0.846	472089	2370695	0.109	-3.04
1574	0.29	23.1	121.492	1573.992	-2.903	0.892	472089.1	2370695	0.28	-2.92
1605	0.3	5.28	152.491	1604.991	-2.75	0.93	472089.3	2370695	0.296	-2.77
1635	0.38	13.51	182.491	1634.991	-2.575	0.961	472089.4	2370695	0.312	-2.59
1666	0.4	19.95	213.49	1665.99	-2.373	1.021	472089.6	2370695	0.155	-2.39
1697	0.34	2.35	244.489	1696.989	-2.18	1.062	472089.8	2370695	0.412	-2.2
1727	0.34	7.63	274.489	1726.989	-2.003	1.078	472090	2370695	0.104	-2.02
1758	0.39	13.35	305.488	1757.988	-1.809	1.114	472090.2	2370695	0.199	-1.83
1789	0.43	15.53	336.487	1788.987	-1.594	1.17	472090.4	2370695	0.138	-1.61
1820	0.45	7.06	367.486	1819.986	-1.361	1.216	472090.6	2370695	0.219	-1.38
1850	0.44	14.36	397.486	1849.986	-1.133	1.259	472090.9	2370695	0.192	-1.15
1881	0.51	4.94	428.484	1880.984	-0.88	1.3	472091.1	2370695	0.338	-0.9
1912	0.53	6.1	459.483	1911.983	-0.6	1.327	472091.4	2370695	0.073	-0.62
1957	0.48	5.75	504.481	1956.981	-0.205	1.368	472091.8	2370695	0.111	-0.23
2002	0.46	5.92	549.48	2001.98	0.162	1.406	472092.2	2370695	0.045	0.14
2047	0.8	357.84	594.477	2046.977	0.656	1.413	472092.7	2370695	0.779	0.63
2091	2.85	2.65	638.453	2090.953	2.055	1.452	472094.1	2370695	4.668	2.03
2136	5.28	3.67	683.336	2135.836	5.24	1.636	472097.2	2370696	5.402	5.21
2181	8.03	2.52	728.028	2180.528	10.447	1.907	472102.4	2370696	6.118	10.41
2226	11.13	0.13	772.396	2224.896	17.932	2.055	472109.9	2370696	6.944	17.89
2271	14.3	359.17	816.287	2268.787	27.835	1.984	472119.8	2370696	7.06	27.8
2316	17.5	359.61	859.559	2312.059	40.161	1.858	472132.2	2370696	7.116	40.12
2361	20.9	358.78	902.05	2354.55	54.956	1.641	472147	2370696	7.58	54.92
2405	23.69	357.54	942.757	2395.257	71.637	1.094	472163.6	2370695	6.43	71.61
2450	25.36	353.88	983.698	2436.198	90.253	-0.322	472182.3	2370694	5.015	90.24
2495	27.27	352.14	1024.033	2476.533	110.049	-2.759	472202	2370691	4.577	110.08
2540	30.15	353.5	1063.498	2515.998	131.495	-5.449	472223.5	2370689	6.562	131.57
2585	33.35	354.9	1101.759	2554.259	155.05	-7.828	472247	2370686	7.297	155.16
2630	36.49	356.36	1138.653	2591.153	180.73	-9.778	472272.7	2370684	7.22	180.87

2674	39.83	356.54	1173.245	2625.745	207.86	-11.459	472299.9	2370683	7.595	208.03
2719	41.15	355.47	1207.468	2659.968	237.007	-13.499	472329	2370681	3.315	237.2
2764	43.76	355.04	1240.666	2693.166	267.275	-16.014	472359.3	2370678	5.836	267.51
2809	46.38	354.56	1272.444	2724.944	298.999	-18.904	472391	2370675	5.871	299.28
2854	49.71	354.87	1302.525	2755.025	332.318	-21.984	472424.3	2370672	7.418	332.65
2899	53.79	355.16	1330.378	2782.878	367.516	-25.051	472459.5	2370669	9.081	367.89
2943	57.24	355.97	1355.287	2807.787	403.67	-27.85	472495.7	2370666	7.986	404.09
2988	58.74	356.15	1379.139	2831.639	441.737	-30.472	472533.7	2370664	3.351	442.2
3033	59.2	355.51	1402.336	2854.836	480.195	-33.276	472572.2	2370661	1.591	480.7
3078	60.28	355.75	1425.013	2877.513	518.95	-36.237	472610.9	2370658	2.444	519.5
3123	61.23	355.87	1446.997	2899.497	558.108	-39.106	472650.1	2370655	2.124	558.7
3168	62.91	356.22	1468.074	2920.574	597.771	-41.847	472689.8	2370652	3.796	598.4
3212	68.1	357.05	1486.311	2938.811	637.728	-44.19	472729.7	2370650	11.92	638.4
3257	72.41	357.25	1501.51	2954.01	680.02	-46.295	472772	2370648	9.587	680.72
3302	75.57	357.83	1513.92	2966.42	723.229	-48.149	472815.2	2370646	7.131	723.95
3347	77.98	358.54	1524.214	2976.714	767.01	-49.535	472859	2370644	5.571	767.75
3441	87.58	357.01	1536.015	2988.515	860.082	-53.165	472952.1	2370641	10.339	860.87
3472	91.24	355.17	1536.334	2988.834	891.002	-55.278	472983	2370639	13.214	891.82
3504	92.02	354.94	1535.424	2987.924	922.869	-58.036	473014.9	2370636	2.541	923.73
3536	92.22	354.71	1534.24	2986.74	954.717	-60.92	473046.7	2370633	0.952	955.63
3567	93.53	354.92	1532.685	2985.185	985.551	-63.718	473077.5	2370630	4.28	986.5
3599	93.13	354.86	1530.826	2983.326	1017.37	-66.563	473109.4	2370627	1.264	1018.37
3631	90.97	353.69	1529.682	2982.182	1049.187	-69.753	473141.2	2370624	7.675	1050.24
3662	90.57	353.17	1529.265	2981.765	1079.981	-73.3	473172	2370621	2.116	1081.09
3694	90.57	352.89	1528.947	2981.447	1111.743	-77.183	473203.7	2370617	0.875	1112.91
3726	91.08	352.83	1528.486	2980.986	1143.491	-81.16	473235.5	2370613	1.605	1144.72
3757	90.87	352.55	1527.959	2980.459	1174.235	-85.104	473266.2	2370609	1.129	1175.53
3789	91.34	352.59	1527.341	2979.841	1205.96	-89.241	473298	2370605	1.474	1207.32
3821	91.55	352.39	1526.535	2979.035	1237.675	-93.422	473329.7	2370601	0.906	1239.1
3853	90.54	351.49	1525.951	2978.451	1269.353	-97.908	473361.4	2370596	4.227	1270.86
3884	90.47	351.39	1525.678	2978.178	1300.007	-102.522	473392	2370591	0.394	1301.58
3916	89.3	351.11	1525.742	2978.242	1331.634	-107.39	473423.6	2370587	3.759	1333.29
3948	89.33	351.11	1526.124	2978.624	1363.247	-112.335	473455.2	2370582	0.094	1364.98
3979	89.26	351.13	1526.506	2979.006	1393.873	-117.12	473485.9	2370577	0.235	1395.69

4011	89.02	350.56	1526.986	2979.486	1425.462	-122.21	473517.5	2370572	1.933	1427.36
4043	89.87	351.34	1527.296	2979.796	1457.061	-127.244	473549.1	2370567	3.605	1459.04
4074	90.47	351.85	1527.204	2979.704	1487.728	-131.775	473579.7	2370562	2.54	1489.78
4106	90.84	351.9	1526.838	2979.338	1519.405	-136.297	473611.4	2370558	1.167	1521.53
4138	90.27	352.1	1526.528	2979.028	1551.092	-140.75	473643.1	2370553	1.888	1553.29
4169	90.34	351.84	1526.363	2978.863	1581.787	-145.081	473673.8	2370549	0.869	1584.06
4201	90.7	351.91	1526.073	2978.573	1613.465	-149.603	473705.5	2370544	1.146	1615.81
4233	90.87	352.01	1525.635	2978.135	1645.147	-154.078	473737.1	2370540	0.616	1647.56
4264	90.74	351.65	1525.199	2977.699	1675.829	-158.483	473767.8	2370536	1.235	1678.32
4296	90.07	351.18	1524.973	2977.473	1707.47	-163.26	473799.5	2370531	2.558	1710.04
4328	89.23	351.08	1525.168	2977.668	1739.086	-168.194	473831.1	2370526	2.644	1741.73
4359	89.43	351.14	1525.531	2978.031	1769.712	-172.985	473861.7	2370521	0.674	1772.44
4391	89.87	351.58	1525.726	2978.226	1801.348	-177.792	473893.3	2370516	1.945	1804.15
4423	90.4	351.96	1525.651	2978.151	1833.018	-182.372	473925	2370512	2.038	1835.9
4454	90.71	352.39	1525.351	2977.851	1863.728	-186.593	473955.7	2370507	1.71	1866.67
4486	90.54	353.71	1525.002	2977.502	1895.49	-190.464	473987.5	2370504	4.159	1898.5
4518	90.77	354.93	1524.636	2977.136	1927.33	-193.631	474019.3	2370500	3.879	1930.39
4549	90.47	354.18	1524.3	2976.8	1958.188	-196.573	474050.2	2370497	2.606	1961.29
4581	90.07	354.89	1524.149	2976.649	1990.042	-199.62	474082	2370494	2.547	1993.19
4627	89.23	355.13	1524.43	2976.93	2035.866	-203.621	474127.9	2370490	1.899	2039.08
4659	89.7	355.34	1524.729	2977.229	2067.754	-206.279	474159.8	2370488	1.609	2071.01
4691	90.47	355.92	1524.682	2977.182	2099.661	-208.718	474191.7	2370485	3.013	2102.95
4722	91.04	358	1524.273	2976.773	2130.613	-210.362	474222.6	2370484	6.956	2133.93
4754	91.65	0.07	1523.522	2976.022	2162.598	-210.9	474254.6	2370483	6.742	2165.92
4786	91.14	0.92	1522.743	2975.243	2194.586	-210.624	474286.6	2370483	3.097	2197.9
4817	91.08	1.94	1522.142	2974.642	2225.571	-209.85	474317.6	2370484	3.295	2228.86
4849	90.34	3.71	1521.746	2974.246	2257.528	-208.273	474349.5	2370486	5.995	2260.79
4881	90.47	4.72	1521.52	2974.02	2289.44	-205.922	474381.4	2370488	3.182	2292.66
4912	91.28	5.08	1521.046	2973.546	2320.323	-203.274	474412.3	2370491	2.859	2323.49
4944	91.81	4.78	1520.183	2972.683	2352.193	-200.525	474444.2	2370493	1.903	2355.31
4976	92.28	5.11	1519.042	2971.542	2384.053	-197.768	474476	2370496	1.794	2387.11
5007	91.64	4.56	1517.981	2970.481	2414.924	-195.157	474506.9	2370499	2.721	2417.94
5039	91.75	4.35	1517.035	2969.535	2446.814	-192.673	474538.8	2370501	0.741	2449.78
5071	91.87	4.49	1516.024	2968.524	2478.703	-190.208	474570.7	2370504	0.576	2481.62

5102	92.31	3.84	1514.894	2967.394	2509.6	-187.958	474601.6	2370506	2.531	2512.47
5119	91.88	3.73	1514.272	2966.772	2526.552	-186.836	474618.5	2370507	2.611	2529.4
5151	91.75	3.69	1513.259	2965.759	2558.468	-184.767	474650.5	2370509	0.425	2561.28
5182	90.4	4.84	1512.677	2965.177	2589.376	-182.462	474681.4	2370512	5.72	2592.14
5214	89.33	5.45	1512.752	2965.252	2621.246	-179.592	474713.2	2370514	3.849	2623.96
5246	89.43	5.04	1513.099	2965.599	2653.11	-176.667	474745.1	2370517	1.319	2655.77
5277	89.7	4.68	1513.334	2965.834	2683.998	-174.041	474776	2370520	1.452	2686.6
5309	90.13	4.14	1513.381	2965.881	2715.903	-171.58	474807.9	2370522	2.157	2718.46
5341	90.5	4.09	1513.206	2965.706	2747.82	-169.284	474839.8	2370525	1.167	2750.33
5372	89.36	4.81	1513.243	2965.743	2778.726	-166.879	474870.7	2370527	4.349	2781.19
5404	88.79	5.35	1513.76	2966.26	2810.596	-164.046	474902.6	2370530	2.454	2813.01
5436	89.3	5.32	1514.293	2966.793	2842.452	-161.071	474934.4	2370533	1.597	2844.81
5467	89.87	5.12	1514.518	2967.018	2873.323	-158.25	474965.3	2370536	1.949	2875.63
5499	89.26	4.94	1514.761	2967.261	2905.199	-155.445	474997.2	2370539	1.988	2907.45
5531	89.46	4.31	1515.118	2967.618	2937.092	-152.865	475029.1	2370541	2.065	2939.3
5562	88.15	4.17	1515.765	2968.265	2968	-150.573	475060	2370543	4.25	2970.16
5594	88.59	4.26	1516.675	2969.175	2999.9	-148.222	475091.9	2370546	1.403	3002.01
5626	89.06	4.39	1517.331	2969.831	3031.803	-145.809	475123.8	2370548	1.524	3033.87
5657	89.97	4.78	1517.594	2970.094	3062.702	-143.331	475154.7	2370551	3.194	3064.72
5689	90.17	4.46	1517.554	2970.054	3094.598	-140.754	475186.6	2370553	1.179	3096.57
5721	90.54	4.48	1517.356	2969.856	3126.5	-138.26	475218.5	2370556	1.158	3128.42
5752	91.01	4.74	1516.937	2969.437	3157.397	-135.769	475249.4	2370558	1.733	3159.27
5784	89.93	4.25	1516.674	2969.174	3189.296	-133.261	475281.3	2370561	3.706	3191.12
5815	89.93	3.85	1516.712	2969.212	3220.219	-131.072	475312.2	2370563	1.29	3222
5847	90.37	3.97	1516.629	2969.129	3252.144	-128.889	475344.1	2370565	1.425	3253.89
5879	90.44	3.72	1516.402	2968.902	3284.071	-126.744	475376.1	2370567	0.811	3285.77
5910	90.27	3.31	1516.21	2968.71	3315.012	-124.843	475407	2370569	1.432	3316.67
5942	90.54	2.1	1515.984	2968.484	3346.975	-123.333	475439	2370571	3.874	3348.61
5974	90.47	2.81	1515.702	2968.202	3378.945	-121.962	475470.9	2370572	2.229	3380.55
6005	90.6	2.63	1515.413	2967.913	3409.908	-120.491	475501.9	2370574	0.716	3411.48
6037	90.57	2.32	1515.086	2967.586	3441.877	-119.11	475533.9	2370575	0.973	3443.42
6069	90.94	2.18	1514.664	2967.164	3473.849	-117.853	475565.8	2370576	1.236	3475.37
6100	90.57	1.94	1514.256	2966.756	3504.826	-116.739	475596.8	2370577	1.423	3506.32
6132	90.13	1.7	1514.06	2966.56	3536.81	-115.723	475628.8	2370578	1.566	3538.28

6164	88.43	1.93	1514.462	2966.962	3568.79	-114.709	475660.8	2370579	5.361	3570.24
6195	88.45	1.66	1515.306	2967.806	3599.763	-113.739	475691.8	2370580	0.873	3601.19
6227	89.09	1.14	1515.993	2968.493	3631.746	-112.957	475723.7	2370581	2.577	3633.16
6259	89.5	1.2	1516.387	2968.887	3663.737	-112.304	475755.7	2370582	1.295	3665.13
6290	89.6	0.81	1516.63	2969.13	3694.731	-111.76	475786.7	2370582	1.299	3696.11
6322	89.63	0.67	1516.845	2969.345	3726.728	-111.347	475818.7	2370583	0.447	3728.1
6354	89.66	0.39	1517.044	2969.544	3758.726	-111.051	475850.7	2370583	0.88	3760.08
6385	89.93	0.11	1517.155	2969.655	3789.725	-110.916	475881.7	2370583	1.255	3791.08
6417	90.4	359.9	1517.062	2969.562	3821.725	-110.913	475913.7	2370583	1.609	3823.07
6449	90.51	0.37	1516.808	2969.308	3853.724	-110.837	475945.7	2370583	1.508	3855.06
6480	90.44	359.8	1516.551	2969.051	3884.722	-110.791	475976.7	2370583	1.852	3886.06
6512	90.9	359.72	1516.177	2968.677	3916.72	-110.925	476008.7	2370583	1.459	3918.05
6544	91.31	359.51	1515.56	2968.06	3948.713	-111.14	476040.7	2370583	1.439	3950.04
6575	91.88	359.82	1514.697	2967.197	3979.7	-111.322	476071.7	2370583	2.093	3981.03
6607	91.81	359.81	1513.667	2966.167	4011.684	-111.425	476103.7	2370583	0.221	4013.01
6643	91.34	359.58	1512.677	2965.177	4047.669	-111.616	476139.7	2370582	1.453	4048.99
6675	91.48	359.17	1511.89	2964.39	4079.658	-111.965	476171.6	2370582	1.354	4080.98
6706	89.7	358.29	1511.571	2964.071	4110.647	-112.652	476202.6	2370581	6.405	4111.98
6738	89.93	358.4	1511.674	2964.174	4142.633	-113.577	476234.6	2370580	0.797	4143.98
6770	90.13	358.61	1511.657	2964.157	4174.622	-114.411	476266.6	2370580	0.906	4175.98
6801	88.49	358.96	1512.031	2964.531	4205.612	-115.069	476297.6	2370579	5.409	4206.97
6833	88.36	358.83	1512.91	2965.41	4237.594	-115.686	476329.6	2370578	0.574	4238.96
6865	87.95	358.52	1513.94	2966.44	4269.569	-116.425	476361.6	2370578	1.606	4270.94
6896	88.56	358.64	1514.884	2967.384	4300.545	-117.193	476392.5	2370577	2.005	4301.93
6928	89.13	357.98	1515.529	2968.029	4332.524	-118.137	476424.5	2370576	2.725	4333.92
6960	89.93	358.58	1515.792	2968.292	4364.508	-119.097	476456.5	2370575	3.125	4365.91
6991	90.4	358.39	1515.703	2968.203	4395.497	-119.917	476487.5	2370574	1.635	4396.91
7023	90.81	358.05	1515.365	2967.865	4427.48	-120.911	476519.5	2370573	1.664	4428.91
7055	91.88	358.39	1514.614	2967.114	4459.455	-121.904	476551.4	2370572	3.508	4460.9
7086	92.31	358.53	1513.48	2965.98	4490.423	-122.737	476582.4	2370571	1.459	4491.87
7118	92.58	358.74	1512.115	2964.615	4522.385	-123.498	476614.4	2370571	1.069	4523.84
7150	92.79	358.93	1510.616	2963.116	4554.343	-124.148	476646.3	2370570	0.885	4555.81
7181	90.81	358.61	1509.643	2962.143	4585.319	-124.813	476677.3	2370569	6.47	4586.79
7213	90.67	358.52	1509.229	2961.729	4617.306	-125.615	476709.3	2370568	0.52	4618.79

7245	90.84	358.66	1508.808	2961.308	4649.294	-126.402	476741.3	2370568	0.688	4650.78
7276	91.58	358.82	1508.153	2960.653	4680.279	-127.084	476772.3	2370567	2.442	4681.78
7308	91.65	358.64	1507.251	2959.751	4712.258	-127.793	476804.2	2370566	0.603	4713.76
7317	91.68	358.68	1506.99	2959.49	4721.252	-128.003	476813.2	2370566	0.555	4722.76
7352	91.68	358.68	1505.964	2958.464	4756.228	-128.809	476848.2	2370565	0	4757.74

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY. DISTANCES, COORDINATES AND BEARINGS SHOWN ARE NOT INTENDED TO BE DEFINITIVE IN ESTABLISHING ACTUAL TITLE BOUNDARIES. THIS DRAWING IS FOR CONSTRUCTION PURPOSES ONLY.
 All Bearings, Distances, and Coordinates shown hereon are based on the Kansas State Plane Coordinate System, N.A.D. 27 Datum, South Zone.

AS-DRILLED
 BOTTOM HOLE

2,025' FEL & 295' FNL
 OF SECTION 16
 LAT: 37.969261
 LON: -97.214491
 X: 2,370,565
 Y: 476,848

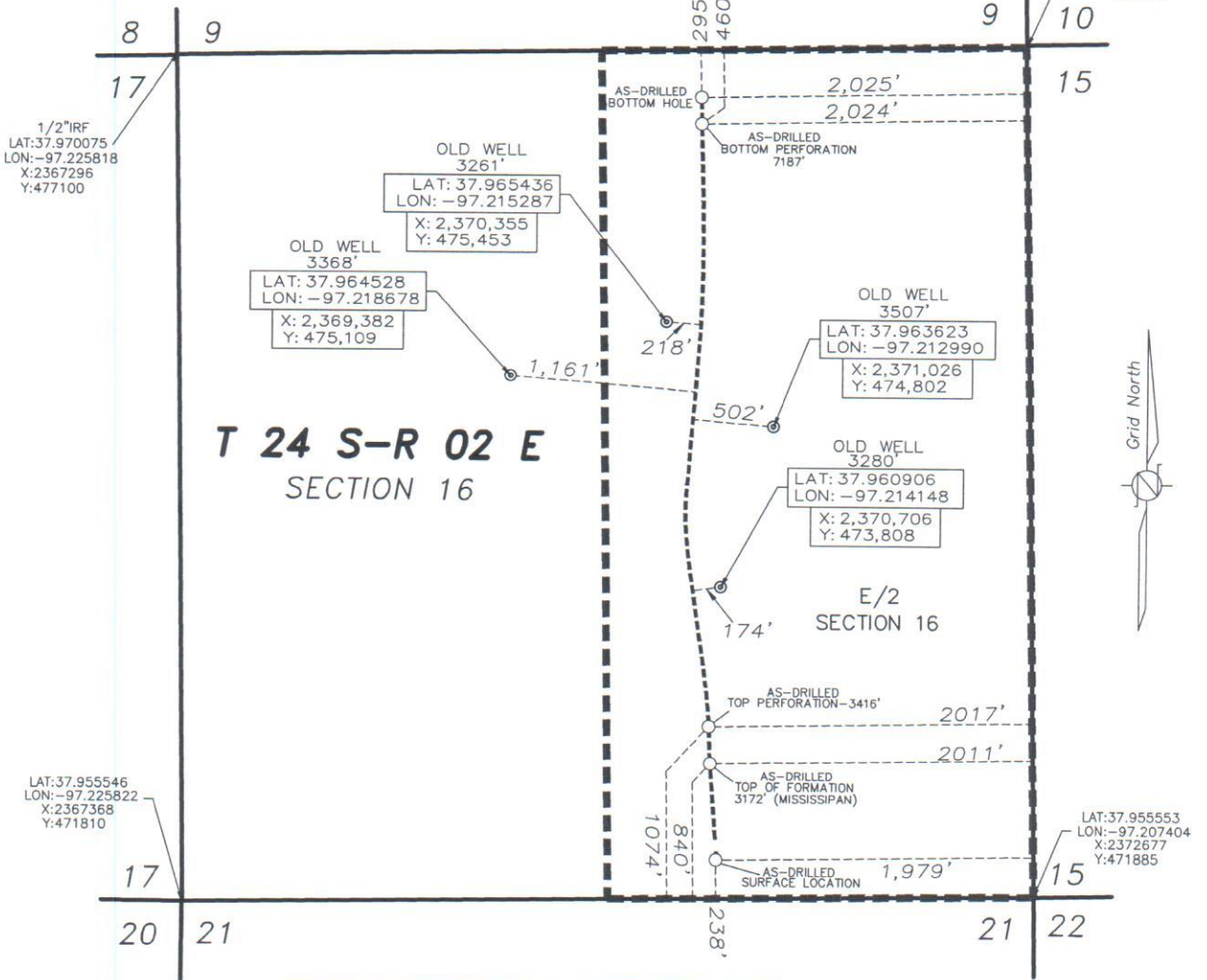
AS-DRILLED
 SURFACE LOCATION
 1,979' FEL & 238' FSL
 OF SECTION 16
 LAT: 37.956195
 LON: -97.214272
 X: 2,370,694
 Y: 472,092
 ELEV: 1438'

AS-DRILLED TOP
 TOP OF FORMATION
 2011' FEL & 840' FSL
 OF SECTION 16
 LAT: 37.957851
 LON: -97.214389
 X: 2,370,652
 Y: 472,694

AS-DRILLED
 TOP PERFORATION
 2017' FEL & 1074' FSL
 OF SECTION 16
 LAT: 37.958491
 LON: -97.214413
 X: 2,370,642
 Y: 472,927

AS-DRILLED
 BOTTOM PERFORATION
 2024' FEL & 460' FNL
 OF SECTION 16
 LAT: 37.968808
 LON: -97.214486
 X: 2,370,569
 Y: 476,683

LAT: 37.970069
 LON: -97.207471
 X: 2372585
 Y: 477171



T 24 S-R 02 E
 SECTION 16

E/2
 SECTION 16

OLD WELLS SHOWN HEREON ARE FROM RECORD INFO.

I hereby certify this plat to be true and correct to the the best of my knowledge and belief.

Sharon Cook

Sharon Cook

REVIEW COPY

AS-DRILLED PLAT
ENCANA OIL & GAS (USA) INC.
NATTIER 16H-2
HARVEY COUNTY, KANSAS
SCALE: 1" = 1000'

----- = UNIT LINE

The Road to Excellence Starts with Safety

Sold To #: 340078	Ship To #: UNKNOWN	Quote #:	Sales Order #: 9774639
Customer: ENCANA OIL & GAS (USA) INC. - EBUS		Customer Rep: Perry, Carey	
Well Name: Nattier 16H	Well #: 2	API/UWI #: 15-079-20693-0100	
Field:	City (SAP): UNKNOWN	County/Parish: Harvey	State: Kansas
Legal Description: Section 16 Township 24S Range 2E			
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: DAIGLE, COLTER		Srvc Supervisor: JOHNSON, ROBERT	MBU ID Emp #: 418417

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
JOHNSON, ROBERT David	20	418417	SLAUGHTER, MICHAEL Eugene	20	492805	STANGL, TIMOTHY David Loui	20	333480

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
08/29/2012	0	0	08/30/2012	13	2			

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	29 - Aug - 2012	20:30	CST
Form Type		BHST	Job Started	30 - Aug - 2012	03:00	CST
Job depth MD	278. ft	Job Depth TVD	Job Completed	30 - Aug - 2012	05:55	CST
Water Depth		Wk Ht Above Floor	Departed Loc	30 - Aug - 2012	06:28	CST
Perforation Depth (MD)	From	To		30 - Aug - 2012	12:00	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Surface Casing Open Hole				12.25				60.	250.		
Preset Conductor	Unknown		14.	13.344	50.		J-55	.	60.		
Surface Casing	Unknown		9.625	8.921	36.		J-55	.	250.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9.625	1	5W
Float Shoe	9.625	1	HES	241	Bridge Plug					Bottom Plug			
Float Collar	9.625	1	HES	283	Retainer					SSR plug set			
Insert Float										Plug Container	9.625	1	HES
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

Fluid Data

Stage/Plug #: 1											
Fluid #	Stage Type	Fluid Name			Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

Stage/Plug #: 1

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	STANDARD	HALCEM (TM) SYSTEM (452986)	90.0	sacks	15.6	1.2	5.32		5.32
	2 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	0.125 lbm	POLY-E-FLAKE (101216940)							
	5.319 Gal	FRESH WATER							
2	Standard Top Out Cement	CMT - STANDARD CEMENT (100003684)	200.0	sacks	15.6	1.18	5.25		5.25
	94 lbm	CMT - STANDARD - CLASS A REG OR TYPE I, BULK (100003684)							
	5.245 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement	19	Shut In: Instant		Lost Returns	0	Cement Slurry	19	Pad	
Top Of Cement	141.5	5 Min		Cement Returns	5	Actual Displacement	19	Treatment	
Frac Gradient		15 Min		Spacers	0	Load and Breakdown		Total Job	
Rates									
Circulating	2	Mixing	2	Displacement	3	Avg. Job	2		
Cement Left In Pipe	Amount	40 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

The Road to Excellence Starts with Safety

Sold To #: 340078	Ship To #: 2948147	Quote #:	Sales Order #: 9785916
Customer: ENCANA OIL & GAS (USA) INC. - EBUS		Customer Rep: Perry, Carey	
Well Name: Nattier 16H	Well #: 2	API/UWI #: 15-079-20693-0100	
Field:	City (SAP): NEWTON	County/Parish: Harvey	State: Kansas
Legal Description: Section 16 Township 24S Range 2E			
Contractor: Precision		Rig/Platform Name/Num: 207	
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: DAIGLE, COLTER		Srvc Supervisor: WOODS, CORY	MBU ID Emp #: 420903

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
PERRY, KENNETH L	6.5	426829	WOODS, CORY C	6.5	420903			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
					02 - Sep - 2012	21:00	CST
Form Type			BHST	On Location	03 - Sep - 2012	02:40	CST
Job depth MD	3591. ft		Job Depth TVD	3000. ft	Job Started	03 - Sep - 2012	06:14
Water Depth			Wk Ht Above Floor		Job Completed	03 - Sep - 2012	07:16
Perforation Depth (MD)	From		To		Departed Loc	03 - Sep - 2012	10:30

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Intermediate Open Hole				8.75				250.	3591.	.	.
Intermediate Casing	Unknown		7.	6.366	23.		N-80	.	3591.	.	3000.
Surface Casing	Unknown		9.625	8.921	36.		J-55	.	250.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	7	1	HWE
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	7	1	QL
Stage Tool										Centralizers	7	3	COMP

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

Fluid Data

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	MidCon-2 Standard	MIDCON-2 CEMENT STANDARD - SBM (15078)	100	sacks	11.4	2.89	17.84		17.84
	0.25 lbm	POLY-E-FLAKE (101216940)							
	17.838 Gal	FRESH WATER							
2	Standard	CMT - STANDARD CEMENT (100003684)	110	sacks	15.6	1.18	5.2		5.2
	94 lbm	CMT - STANDARD - CLASS A REG OR TYPE I, BULK (100003684)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	5.204 Gal	FRESH WATER							
Calculated Values		Pressures			Volumes				
Displacement	128.5	Shut In: Instant		Lost Returns	NO	Cement Slurry	74.5	Pad	
Top Of Cement	1582.58	5 Min		Cement Returns	0	Actual Displacement	128.5	Treatment	
Frac Gradient		15 Min		Spacers	0	Load and Breakdown		Total Job	203
Rates									
Circulating	5	Mixing	5	Displacement	5	Avg. Job	5		
Cement Left In Pipe	Amount	40 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

The Road to Excellence Starts with Safety

Sold To #: 340078	Ship To #: 2948147	Quote #:	Sales Order #: 9809256
Customer: ENCANA OIL & GAS (USA) INC. - EBUS		Customer Rep: Perry, Carey	
Well Name: Nattier 16H	Well #: 2	API/UWI #: 15-079-20693-0100	
Field:	City (SAP): NEWTON	County/Parish: Harvey	State: Kansas
Legal Description: Section 16 Township 24S Range 2E			
Contractor: Precision		Rig/Platform Name/Num: 207	
Job Purpose: Cement Production Liner			
Well Type: Development Well		Job Type: Cement Production Liner	
Sales Person: DAIGLE, COLTER		Srcv Supervisor: UNDERWOOD, BILLY MBU ID Emp #: 159068	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CRAWFORD, ANDREW B	12	480612	SMITH, CHAD R	10	523862	TERRY, STACY Glen	12	373291
UNDERWOOD, BILLY Dale	12	159068						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10714253C	165 mile	10857010	165 mile	11706678	165 mile	12003765	165 mile
NA	165 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
9-12-12	1.5	0	9-13-12	10.5	1.3			
TOTAL			<i>Total is the sum of each column separately</i>					

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
				On Location	12 - Sep - 2012	16:00	CST
Form Type			BHST	Job Started	12 - Sep - 2012	22:30	CST
Job depth MD	7206. ft		Job Depth TVD	Job Started	13 - Sep - 2012	08:10	CST
Water Depth			Wk Ht Above Floor	Job Completed	13 - Sep - 2012	09:30	GMT
Perforation Depth (MD)	From		To	Departed Loc	13 - Sep - 2012	10:15	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Production Liner Open Hole				6.125				3591.	7206.	3000.	2999.
Intermediate Casing	Unknown		7.	6.366	23.		N-80	.	3591.	.	3000.
Production Liner	New		4.5	4.	11.6	Unknown	P-110	3291.	7206.	3000.	2999.
Drill Pipe	New		3.5	2.992	10.2	Unknown		.	3291.	.	.

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Rig Water		60.00	bbl	8.33	.0	.0	.0	
2	50/50 POZ STANDARD (w/ 2% extra gel)	ECONOCEM (TM) SYSTEM (452992)	395.0	sacks	13.6	1.53	7.41		7.41
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	2 %	BENTONITE, BULK (100003682)							
	7.41 Gal	FRESH WATER							
Calculated Values		Pressures			Volumes				
Displacement	95	Shut In: Instant		Lost Returns		Cement Slurry	107	Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement	94	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	261
Rates									
Circulating	5	Mixing	5	Displacement	5	Avg. Job	5		
Cement Left In Pipe	Amount	84 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					