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KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

ORIGINAL

Form ACO-1  
September 1999  
Form Must Be Typed

Operator: License # 5447  
Name: OXY USA Inc.  
Address: P.O. Box 2528  
City/State/Zip: Liberal, KS 67905  
Purchaser: Duke Energy  
Operator Contact Person: Vicki Carder  
Phone: (620) 629-4200  
Contractor: Name: Cheyenne Drilling LP  
License: 33375  
Wellsite Geologist: NA

Designate Type of Completion:  
 New Well  Re-Entry  Workover  
 Oil  SWD  SLOW  Temp. Abd.  
 Gas  ENHR  SIGW  
 Dry  Other (Core, WSW, Expl, Cathodic, 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./SWD  
 Plug Back  Plug Back Total Depth  
 Commingled  Docket No. \_\_\_\_\_  
 Dual Completion  Docket No. \_\_\_\_\_  
 Other (SWD or Enhr.?)  Docket No. \_\_\_\_\_  
03/0506 03/07/06 04/06/06  
Spud Date or Date Reached TD Completion Date or Recompletion Date

API No. 15 - 175-22032-56-80  
County: Seward  
     - NW - SE - SE Sec 33 Twp. 32 S. R. 34W  
1308 feet from (S) N (circle one) Line of Section  
1250 feet from (E) W (circle one) Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
(circle one) NE (SE) NW SW  
Lease Name: Hitch G Well #: 4  
Field Name: Hugoton Chase  
Producing Formation: Chase  
Elevation: Ground: 2892 Kelly Bushing: 2898  
Total Depth: 3065 Plug Back Total Depth: 3016  
Amount of Surface Pipe Set and Cemented at 655 feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set \_\_\_\_\_  
If Alternate II completion, cement circulated from \_\_\_\_\_  
feet depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan ALT IWHW  
*(Data must be collected from the Reserve Pit)* 7-2-07  
Chloride content 6000 mg/l ppm Fluid volume 900 bbls  
Dewatering method used Evaporation  
Location of fluid disposal if hauled offsite: \_\_\_\_\_  
Operator Name: \_\_\_\_\_  
Lease Name: \_\_\_\_\_ License No.: \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp, \_\_\_\_\_ S. R.  East  West  
County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 6702, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: Vicki Carder  
Title: Capital Project Date 06/29/06  
Subscribed and sworn to before me this 29th day of June  
20 06  
Notary Public: Kathleen R. Poulton  
Date Commission Expires: November 8, 2006



KCC Office Use Only  
 Letter of Confidentiality Attached  
If Denied, Yes  Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution

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Side Two

Operator Name: OXY USA Inc. Lease Name: Hitch G Well #: 4
Sec. 33 Twp. 32 S. R. 34W East West County: Seward

Instructions: Show important tops and base 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. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken, Samples Sent to Geological Survey, Cores Taken, Electric Log Run, List All E. Logs Run: CBL, Induction, Neutron, Microlog. Log Formation (Top), Depth and Datum table with entries: Hollenberg, Herington, Krider, Winfield, Towanda, Council Grove, A1 LM.

CASING RECORD table with columns: Purpose of String, Size Hole Drilled, Size Casing Set, Weight Lbs./ft., Setting Depth, Type of Cement, # Sacks Used, Type and Percent Additives. Rows for Conductor, Surface, and Production.

ADDITIONAL CEMENTING / SQUEEZE RECORD

Table for Additional Cementing / Squeeze Record with columns: Purpose, Depth Top Bottom, Type of Cement, #Sacks Used, Type and Percent Additives.

PERFORATION RECORD - Bridge Plugs Set/type table with columns: Shots Per Foot, Specify Footage of Each Interval Perforated, Acid, Fracture, Shot, Cement Squeeze Record, Depth.

TUBING RECORD table with columns: Size, Set At, Packer At, Liner Run (Yes/No).

Table for Date of First, Resumed Production, SWD or Enhr. and Producing Method (Flowing, Pumping, Gas Lift, Other).

Table for Estimated Production Per 24 Hours with columns: Oil BBLS, Gas Mcf, Water BBLS, Gas-Oil Ratio, Gravity.

Disposition of Gas, METHOD OF COMPLETION, Production Interval. Includes checkboxes for Vented, Sold, Used on Lease, Open Hole, Perf., Dually Comp., Commingled, Other.

Side Three

Operator Name: OXY USA Inc. Lease Name: Hitch G Well #: 4

Sec. 33 Twp. 32 S. R. 34W  East  West County: Seward

<u>Name</u>	<u>Top</u>	<u>Datum</u>
B1 SH	2972	-74
B1 LM	2983	-85
B2 SH	3004	-106

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Cementing Service Report

Customer OXY USA, INC.						Job Number 2205549303			
Well HITCH G 4			Location (legal) Sec 33-T32S-R34W			Schlumberger Location Perryton, TX			Job Start 2006-Mar-05
Field HUGOTON		Formation Name/Type Clean-Sandstone		Deviation °	Bit Size 12.3 in	Well MD 656 ft	Well TVD 656 ft		
County SEWARD		State/Province KANSAS		BHP psi	BHST 86 °F	BHCT °F	Pore Press. Gradient psi/ft		
Well Master: 0630783989		API / UWI: 15175220340000		Casing/Liner					
Rig Name CHEYENNE 8	Drilled For Gas		Service Via Land		Depth, ft 660	Size, in 8.63	Weight, lb/ft 24	Grade K55	Thread 8RD
Offshore Zone	Well Class New		Well Type Development		Tubing/Drill Pipe				
Drilling Fluid Type Bentonite		Max. Density 9.5 lb/gal	Plastic Viscosity 36 cp		Depth,	Size, in	Weight, lb/ft	Grade	Thread
Service Line Cementing		Job Type Cem Surface Casing			Perforations/Open Hole				
Max. Allowed Tubing Pressure 1500 psi		Max. Allowed Ann. Pressure psi	WellHead Connection 8 5/8" H&SM		Top, ft	Bottom, ft	spf	No. of Shots	Total Interval ft
Service Instructions CEMENT 8 5/8" SURFACE CASING WITH: 10 BBL FRESH WATER 145 SK 35:65 POZ:CLASS C + 6% D020 + 2% S001 + 0.5 pps D029 195 SK CLASS C + 2% S001 + 0.25 pps D029				Diameter in	Treat Down Casing	Displacement 39.5 bbl	Packer Type	Packer Depth ft	
Tubing Vol. bbl		Casing Vol. 42 bbl		Annular Vol. 49 bbl		OpenHole Vol. 96 bbl			
Casing/Tubing Secured <input checked="" type="checkbox"/>			1 Hole Volume Circulated prior to Cementing <input type="checkbox"/>			Casing Tools		Squeeze Job	
Lift Pressure: 240 psi			Pipe Rotated <input type="checkbox"/>			Pipe Reciprocated <input type="checkbox"/>			
Shoe Type: Guide			Shoe Depth: 660 ft			Squeeze Type			
No. Centralizers: 4			Top Plugs: 1	Bottom Plugs:		Tool Type:			
Cement Head Type: Single			Stage Tool Type:			Tool Depth: ft			
Job Scheduled For:			Arrived on Location: 2006-Mar-05 17:00		Leave Location: 2006-Mar-05 19:30		Stage Tool Depth: ft		
Collar Type: Auto-Fill			Collar Depth: 617 ft			Tall Pipe Size: in			
Collar Depth: 617 ft			Sqz Total Vol: bbl			Tall Pipe Depth: ft			
Date	Time	Treating Pressure	Flow Rate	Density	CMT STG VOL	CMT VOL	0	0	Message
	24 hr clock	psi	bbl/min	lb/gal	bbl	bbl	0	0	
2006-Mar-05	19:00	13	0.0	8.35	0.0	0.0	0	0	
2006-Mar-05	19:00	5	0.1	8.35	1.0	1.0	0	0	
2006-Mar-05	19:01	5	0.0	8.35	1.0	1.0	0	0	
2006-Mar-05	19:01	1620	0.0	8.35	1.0	1.0	0	0	
2006-Mar-05	19:02	14	0.0	8.34	1.0	1.0	0	0	
2006-Mar-05	19:02	55	4.0	8.34	2.1	2.1	0	0	
2006-Mar-05	19:03	78	5.0	8.35	4.4	4.4	0	0	
2006-Mar-05	19:03	82	5.1	8.35	6.9	6.9	0	0	
2006-Mar-05	19:04	82	5.1	8.35	9.4	9.4	0	0	
2006-Mar-05	19:04	92	5.1	8.35	12.0	12.0	0	0	
2006-Mar-05	19:05	96	5.2	8.95	13.7	13.7	0	0	
2006-Mar-05	19:05								Reset Total, Vol = 13.73 bbl
2006-Mar-05	19:05	101	5.2	9.42	0.6	14.3	0	0	
2006-Mar-05	19:05	101	5.3	9.64	1.0	14.8	0	0	
2006-Mar-05	19:05								Start Mixing Lead Slurry
2006-Mar-05	19:05	124	5.3	10.91	3.2	17.0	0	0	
2006-Mar-05	19:06	146	5.3	12.09	5.9	19.6	0	0	
2006-Mar-05	19:06	137	5.4	11.92	8.6	22.3	0	0	
2006-Mar-05	19:07	156	5.2	12.53	11.2	25.0	0	0	
2006-Mar-05	19:07	133	5.4	12.19	13.9	27.6	0	0	
2006-Mar-05	19:08	133	5.3	12.36	16.6	30.3	0	0	
2006-Mar-05	19:08	124	5.2	12.05	19.2	32.9	0	0	

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Well		Field			Service Date		Customer		Job Number
HITCH G #4		HUGOTON			0664-Mar-05		OXY USA, INC.		2205549303
Date	Time	Treating Pressure	Flow Rate	Density	CMT STG VOL	CMT VOL	0	0	Message
	24 hr clock	psi	bbbl/min	lb/gal	bbbl	bbbl	0	0	
2006-Mar-05	19:09	105	5.3	12.44	21.8	35.5	0	0	<b>KCC</b>
2006-Mar-05	19:09	110	5.4	12.47	24.5	38.2	0	0	
2006-Mar-05	19:10	110	5.3	12.27	27.1	40.8	0	0	
2006-Mar-05	19:10	110	5.3	12.16	29.8	43.5	0	0	
2006-Mar-05	19:11	110	5.3	12.17	32.4	46.2	0	0	
2006-Mar-05	19:11	110	5.3	12.24	35.1	48.8	0	0	
2006-Mar-05	19:12	114	5.4	12.26	37.8	51.5	0	0	
2006-Mar-05	19:12	110	5.4	12.27	40.4	54.2	0	0	
2006-Mar-05	19:13	110	5.4	12.27	43.2	56.9	0	0	
2006-Mar-05	19:13	114	5.4	12.26	45.9	59.6	0	0	
2006-Mar-05	19:14	105	5.4	12.25	48.6	62.3	0	0	
2006-Mar-05	19:14	110	5.4	12.04	51.3	65.0	0	0	
2006-Mar-05	19:15	101	5.5	11.58	54.0	67.8	0	0	
2006-Mar-05	19:15								Reset Total, Vol = 55.93 bbl
2006-Mar-05	19:15	110	5.5	12.50	55.9	69.7	0	0	
2006-Mar-05	19:15								Start Mixing Tail Slurry
2006-Mar-05	19:15	114	5.5	12.61	0.2	69.9	0	0	
2006-Mar-05	19:15	114	5.5	12.79	0.7	70.5	0	0	
2006-Mar-05	19:16	142	5.4	14.39	3.4	73.2	0	0	
2006-Mar-05	19:16	160	5.4	15.09	6.1	75.9	0	0	
2006-Mar-05	19:17	151	5.4	14.75	8.8	78.6	0	0	
2006-Mar-05	19:17	119	5.0	14.58	11.4	81.2	0	0	
2006-Mar-05	19:18	137	5.0	15.10	13.9	83.7	0	0	
2006-Mar-05	19:18	128	5.0	15.13	16.4	86.1	0	0	
2006-Mar-05	19:19	128	5.0	14.69	18.9	88.6	0	0	
2006-Mar-05	19:19	114	5.1	13.85	21.4	91.1	0	0	
2006-Mar-05	19:20	119	5.1	14.19	23.9	93.6	0	0	
2006-Mar-05	19:20	114	5.0	13.95	26.4	96.2	0	0	
2006-Mar-05	19:21	96	4.4	14.62	28.8	98.5	0	0	
2006-Mar-05	19:21	87	4.5	14.38	31.0	100.7	0	0	
2006-Mar-05	19:22	105	4.3	14.66	33.2	102.9	0	0	
2006-Mar-05	19:22	105	4.4	14.99	35.4	105.1	0	0	
2006-Mar-05	19:23	96	4.4	14.65	37.6	107.3	0	0	
2006-Mar-05	19:23	101	4.4	15.10	39.8	109.5	0	0	
2006-Mar-05	19:24	101	4.4	14.94	42.0	111.7	0	0	
2006-Mar-05	19:24	114	4.4	16.10	44.3	114.0	0	0	
2006-Mar-05	19:25	146	4.4	16.49	46.4	116.2	0	0	
2006-Mar-05	19:25	0	0.1	3.01	47.7	117.4	0	0	
2006-Mar-05	19:26	0	0.2	15.11	48.3	118.0	0	0	
2006-Mar-05	19:26	0	0.0	15.26	48.3	118.0	0	0	
2006-Mar-05	19:27	0	0.0	14.70	48.3	118.0	0	0	
2006-Mar-05	19:27	0	0.0	14.18	48.3	118.1	0	0	
2006-Mar-05	19:28	0	0.0	13.05	48.3	118.1	0	0	
2006-Mar-05	19:28	0	0.0	12.72	48.3	118.1	0	0	
2006-Mar-05	19:29	0	0.0	12.53	48.3	118.1	0	0	
2006-Mar-05	19:29	0	0.0	12.50	48.3	118.1	0	0	
2006-Mar-05	19:30	0	0.0	12.28	48.3	118.1	0	0	
2006-Mar-05	19:30	0	0.0	12.27	48.3	118.1	0	0	
2006-Mar-05	19:30								Reset Total, Vol = 48.31 bbl
2006-Mar-05	19:30	0	0.0	12.27	48.3	118.1	0	0	
2006-Mar-05	19:30								Drop Top Plug
2006-Mar-05	19:30	0	0.0	12.27	48.3	118.1	0	0	
2006-Mar-05	19:30								Start Displacement
2006-Mar-05	19:30	46	0.0	12.25	0.0	0.0	0	0	

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Well		Field			Service Date		Customer		Job Number
HITCH G #4		HUGOTON			0664-Mar-05		OXY USA, INC.		2205549303
Date	Time	Treating Pressure	Flow Rate	Density	CMT STG VOL	CMT VOL	0	0	Message
	24 hr clock	psi	bbl/min	lb/gal	bbl	bbl	0	0	
2006-Mar-05	19:31	101	5.3	9.38	0.8	0.8	0	0	
2006-Mar-05	19:31	60	4.9	9.08	3.4	3.4	0	0	
2006-Mar-05	19:32	64	5.0	8.42	5.9	5.9	0	0	
2006-Mar-05	19:32	64	4.9	8.36	8.4	8.4	0	0	
2006-Mar-05	19:33	69	4.7	8.56	10.8	10.8	0	0	
2006-Mar-05	19:33	69	4.7	8.60	13.1	13.1	0	0	
2006-Mar-05	19:34	78	4.7	8.66	15.5	15.5	0	0	
2006-Mar-05	19:34	101	4.6	8.35	17.8	17.8	0	0	
2006-Mar-05	19:35	101	4.6	8.35	20.1	20.1	0	0	
2006-Mar-05	19:35	128	4.7	8.43	22.4	22.4	0	0	
2006-Mar-05	19:36	137	4.7	8.44	24.8	24.8	0	0	
2006-Mar-05	19:36	151	4.3	8.35	27.1	27.1	0	0	
2006-Mar-05	19:37	151	4.3	8.35	29.2	29.2	0	0	
2006-Mar-05	19:37	165	2.6	8.35	30.8	30.8	0	0	
2006-Mar-05	19:38	156	2.6	8.38	32.1	32.1	0	0	
2006-Mar-05	19:38	197	2.6	8.38	33.4	33.4	0	0	
2006-Mar-05	19:39	206	2.6	8.38	34.7	34.7	0	0	
2006-Mar-05	19:39	211	2.6	8.36	36.0	36.0	0	0	
2006-Mar-05	19:40	201	2.6	8.35	37.3	37.3	0	0	
2006-Mar-05	19:40	188	2.5	8.35	38.6	38.6	0	0	
2006-Mar-05	19:41	1103	2.5	8.35	39.8	39.8	0	0	
2006-Mar-05	19:41	1126	0.0	8.35	40.0	40.0	0	0	
2006-Mar-05	19:42	224	0.0	8.35	40.0	40.0	0	0	
2006-Mar-05	19:42	0	0.0	8.35	40.0	40.0	0	0	
2006-Mar-05	19:43	0	0.0	8.35	40.0	40.0	0	0	
2006-Mar-05	19:43								Reset Total, Vol = 39.5 bbl
2006-Mar-05	19:43	0	0.0	8.35	40.0	40.0	0	0	
2006-Mar-05	19:43	0	0.0	8.35	0.0	0.0	0	0	
2006-Mar-05	19:43								End Displacement
2006-Mar-05	19:43								Bump Top Plug
2006-Mar-05	19:43	0	0.0	8.35	0.0	0.0	0	0	
2006-Mar-05	19:43	0	0.0	8.35	0.0	0.0	0	0	
2006-Mar-05	19:44								End Job
2006-Mar-05	19:44	0	0.0	8.35	0.0	0.0	0	0	

**Post Job Summary**

Average Pump Rates, bpm				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
4			5.5	104		12	
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Volume	Density	
230		150	1000			8.34 lb/gal	
Avg. N2 Percent		Designed Slurry Volume	Displacement	Mix Water Temp	<input checked="" type="checkbox"/> Cement Circulated to Surface?	Volume	30 bbl
		103 bbl	39.5 bbl	65 °F	<input type="checkbox"/> Washed Thru Perfs	To	ft
Customer or Authorized Representative			Schlumberger Supervisor				
HANNA, RUSTY			Grigoriev, Valery				
			<input type="checkbox"/> Circulation Lost		<input checked="" type="checkbox"/> Job Completed		

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Client: Oxy USA  
 Well Name: Hitch  
 Well Number: G4  
 Legal Location: Sec 33-T32S-R34W  
 County: Seward  
 State: KS

Job Number: 2205549303  
 Job Type: Surface  
 Hole Size: 12 1/4  
 Casing Size: 8 5/8  
 Total Depth: 656  
 DV Tool @

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**Fluid Systems**

<b>Mud:</b>	bbbl			
weight:	9 lb/gal			
height	feet			

<b>Wash:</b>	10 bbl	Water		
weight:	8.35 lb/gal	volumes:	56 cuft	slurry: 10 bbls
yield:	cuft/sk	height:	136 feet	water: 10 bbls
mix req:	gal/sk			

<b>Lead:</b>	145 sks	35/65 POZ/C + 6%D020 + 2%S001 + 0.25 ppsD130		
weight:	12.2 lb/gal	volumes:	316 cuft	slurry: 56 bbls
yield:	2.18 cuft/sk	height:	766 feet	water: 43 bbls
mix req:	12.4 gal/sk			Thickening Time: hr:min

<b>Tail:</b>	195 sks	Class C + 2%S001 + 0.125 pps D130		
weight:	14.8 lb/gal	volumes:	261 cuft	slurry: 47 bbls
yield:	1.34 cuft/sk	height:	633 feet	water: 29 bbls
mix req:	6.3 gal/sk			Thickening Time: hr:min

<b>Displacement:</b>	39.30 bbl	Fresh Water	density	8.33 lb/gal
Total:	39.30 bbl			

**Casing Data**

O.D.	8.625 inches	CSG vol:	0.0637 bbl/ft	Ann. vol:	0.0735 bbl/ft
I.D.	8.097 inches	OH vol:	0.1458 bbl/ft		2.4228 ft/cuft
Csg Wt:	Feet	volume	Shoe Joint Length		
0.064	24	660.00	42.04 bbls.	Csg:	43.00 feet
0.077	36		0.00 bbls.	Shoe:	feet
0.077	36		0.00 bbls.	Collar:	feet

**Volumes**

Total Depth	656 feet	4.00 Above Floor		
Total Pipe	660 feet	42.04 bbls.	Open Hole	95.63 bbls.
Shoe Joint	43 feet	2.74 bbls.	Annulus	48.52 bbls.
Float Collar@	617 feet	39.30 bbls.	Total Water	146 bbls needed

**Post Job Info**

TOC LEAD	0 ft	Final Diff. Pressure	psi	
TOC TAIL	27 ft	Bump Top Plug to	psi @ approx.	hours
Excess	100 %	Circulated	bbls to Surface	

Casing Wt (Air)	15,840 lbs.	Casing Area ID	51.4919 sq in.	
Hyd PSI(Annulus)	504 psi	Hyd PSI(Casing)	300 psi	
Csg Cross Sect.	6.9345 sq in.	#VALUE!	300	
Bouyancy	3,497 lbs.	Casing Lift Pressure	240 psi	
Hook Load	12,343 lbs.	Differential Lift Pressure	204 psi	

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Pressure Test: 1500 psi  
Top Pressure : 1000 psi

10 bbl Water

56 bbl Lead Slurry @ 12.2 ppg

47 bbl Tail Slurry @ 14.8 ppg

SDDP

39.5 bbl Fresh Water Displacement

Bump Plug @ 1000 psi

Differential P = 204 psi

Lift Pressure = 240 psi

Total Water Needed= 146 bbl



Customer <b>OXY RESOURCE CALIFORNIA LLC</b>						Job Number <b>2205549309</b>				
Well <b>HITCH G 4</b>			Location (legal) <b>Sec 33-T32S-R34W</b>			Schlumberger Location <b>Perryton, TX</b>			Job Start <b>2006-Mar-07</b>	
Field <b>HUGOTON</b>		Formation Name/Type		Deviation <b>°</b>		Bit Size <b>7.78 in</b>	Well MD <b>3,100 ft</b>	Well TVD <b>3,100 ft</b>		
County <b>SEWARD</b>		State/Province <b>KANSAS</b>		BHP <b>psi</b>	BHST <b>110 °F</b>	BHCT <b>88 °F</b>	Pore Press. Gradient <b>psi/ft</b>			
Well Master: <b>0630783989</b>		API / UWI:		<b>Casing/Liner</b>						
Rig Name <b>CHEYENNE 8</b>	Drilled For <b>Gas</b>		Service Via		Depth, ft <b>3100</b>	Size, in <b>4.5</b>	Weight, lb/ft <b>11.6</b>	Grade <b>K55</b>	Thread <b>8RD</b>	
Offshore Zone	Well Class <b>New</b>	Well Type <b>Development</b>		<b>Tubing/Drill Pipe</b>						
Drilling Fluid Type <b>Bentonite</b>		Max. Density <b>9 lb/gal</b>	Plastic Viscosity <b>35 cp</b>	Depth,	Size, in	Weight, lb/ft	Grade	Thread		
Service Line <b>Cementing</b>		Job Type <b>Cem Prod Casing</b>		<b>Perforations/Open Hole</b>						
Max. Allowed Tubing Pressure <b>1500 psi</b>	Max. Allowed Ann. Pressure <b>psi</b>	WellHead Connection <b>4.5" H&amp;SM</b>		Top, ft	Bottom, ft	spf	No. of Shots	Total Interval <b>ft</b>		
<b>Service Instructions</b> CEMENT 4 1/2 PRODUCTION CASING WITH: 20 bbls CW100 235 SK 35:65 POZ:CLASS C + 6% D020 + 2% S001 + 0.5 pps D029 175 SK 50/50 POZ:H+2%D20+3%M117+5 pps D42+5 pps D53+0.6%D112+ 0.25%D65+0.25%D46				Treat Down <b>Casing</b>	Displacement <b>47 bbl</b>	Packer Type	Packer Depth <b>ft</b>			
				Tubing Vol. <b>bbl</b>	Casing Vol. <b>47.5 bbl</b>	Annular Vol. <b>125 bbl</b>	OpenHole Vol. <b>185 bbl</b>			
				Casing/Tubing Secured <input checked="" type="checkbox"/>	1 Hole Volume Circulated prior to Cementing <input checked="" type="checkbox"/>	<b>Casing Tools</b>		<b>Squeeze Job</b>		
				Lift Pressure: <b>2090 psi</b>	Pipe Rotated <input type="checkbox"/>	Pipe Reciprocated <input type="checkbox"/>	Shoe Type: <b>Guide</b>	Shoe Depth: <b>3069 ft</b>	Squeeze Type	
No. Centralizers: <b>20</b>	Top Plugs: <b>1</b>	Bottom Plugs: <b>0</b>	Stage Tool Type:	Tool Depth: <b>ft</b>	Stage Tool Depth: <b>ft</b>					
Cement Head Type: <b>Single</b>		Job Scheduled For:	Arrived on Location: <b>2006-Mar-07 19:30</b>	Leave Location: <b>2006-Mar-07 22:30</b>	Collar Type: <b>Auto-Fill</b>	Collar Depth: <b>3024 ft</b>	Tail Pipe Size: <b>in</b>	Tail Pipe Depth: <b>ft</b>	Sqz Total Vol: <b>bbl</b>	
Date	Time <small>24 hr clock</small>	Treating Pressure <small>psi</small>	Flow Rate <small>bbl/min</small>	Density <small>lb/gal</small>	CMT STG VOL <small>bbl</small>	CMT VOL <small>bbl</small>	0	0	Message	
2006-Mar-07	20:33	13	0.0	8.34	0.0	0.0	0	0		
2006-Mar-07	20:33								Start Job	
2006-Mar-07	20:33	0	0.0	8.34	0.0	0.0	0	0		
2006-Mar-07	20:33	0	0.0	8.34	0.0	0.0	0	0		
2006-Mar-07	20:33								Pressure Test Lines	
2006-Mar-07	20:34	0	0.0	8.34	0.0	0.0	0	0		
2006-Mar-07	20:34	0	0.0	8.34	0.0	0.0	0	0		
2006-Mar-07	20:35								Start CW 100	
2006-Mar-07	20:35	73	3.5	8.34	0.3	0.3	0	0		
2006-Mar-07	20:35	87	1.3	8.34	0.5	0.5	0	0		
2006-Mar-07	20:35	69	2.7	8.33	1.5	1.5	0	0		
2006-Mar-07	20:36	9	0.0	8.34	2.1	2.1	0	0		
2006-Mar-07	20:36	14	0.0	8.34	2.5	2.5	0	0		
2006-Mar-07	20:37	9	0.0	8.34	2.5	2.5	0	0		
2006-Mar-07	20:37	82	0.1	8.34	2.5	2.5	0	0		
2006-Mar-07	20:38	82	0.0	8.33	2.5	2.5	0	0		
2006-Mar-07	20:38	78	0.0	8.34	2.5	2.5	0	0		
2006-Mar-07	20:39	3772	0.0	8.33	2.6	2.6	0	0		
2006-Mar-07	20:39	14	0.0	8.33	2.6	2.6	0	0		
2006-Mar-07	20:40	18	0.0	8.33	2.6	2.6	0	0		
2006-Mar-07	20:40	211	4.1	8.34	3.7	3.7	0	0		
2006-Mar-07	20:41	188	5.9	8.35	6.1	6.1	0	0		

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Well			Field		Service Date		Customer		Job Number
HITCH G #4			HUGOTON		0666-Mar-07		OXY RESOURCE CALIFORNIA LLC		2205549309
Date	Time	Treating Pressure	Flow Rate	Density	CMT STG VOL	CMT VOL	0	0	Message
	24 hr clock	psi	bbl/min	lb/gal	bbl	bbl	0	0	
2006-Mar-07	20:41	165	5.4	8.35	8.8	8.8	0	0	
2006-Mar-07	20:42	174	5.5	8.34	11.0	11.0	0	0	
2006-Mar-07	20:42								Reset Total, Vol = 22.53 bbl
2006-Mar-07	20:42	188	5.4	8.34	11.5	11.5	0	0	
2006-Mar-07	20:42	211	5.5	8.35	14.2	14.2	0	0	
2006-Mar-07	20:43	197	5.6	8.35	17.1	17.1	0	0	
2006-Mar-07	20:43	243	6.1	8.35	20.1	20.1	0	0	
2006-Mar-07	20:44								Start Water Spacer
2006-Mar-07	20:44	160	6.4	8.89	0.2	0.2	0	0	
2006-Mar-07	20:44								Reset Total, Vol = 5.05 bbl
2006-Mar-07	20:44	192	5.7	8.44	0.5	0.5	0	0	
2006-Mar-07	20:44	183	5.6	8.38	0.6	0.6	0	0	
2006-Mar-07	20:44	197	5.4	8.34	3.4	3.4	0	0	
2006-Mar-07	20:44	220	5.6	8.41	0.2	0.2	0	0	
2006-Mar-07	20:44								End Spacer
2006-Mar-07	20:44								Start Mixing Lead Slurry
2006-Mar-07	20:44	114	5.5	8.41	0.4	0.4	0	0	
2006-Mar-07	20:45	229	5.6	8.46	1.0	1.0	0	0	
2006-Mar-07	20:45	169	3.9	9.44	3.7	3.7	0	0	
2006-Mar-07	20:46	311	25.0	0.05	8.2	8.2	0	0	
2006-Mar-07	20:46	0	0.7	9.27	18.3	18.3	0	0	
2006-Mar-07	20:47	-5	0.2	9.09	18.4	18.4	0	0	
2006-Mar-07	20:47	73	3.4	9.05	18.9	18.9	0	0	
2006-Mar-07	20:48	-9	0.4	9.04	18.9	18.9	0	0	
2006-Mar-07	20:48	362	7.3	8.44	18.9	18.9	0	0	
2006-Mar-07	20:49	247	6.5	8.44	18.9	18.9	0	0	
2006-Mar-07	20:49	73	2.9	8.76	18.9	18.9	0	0	
2006-Mar-07	20:50	307	6.7	8.99	18.9	18.9	0	0	
2006-Mar-07	20:50	243	5.8	8.97	18.9	18.9	0	0	
2006-Mar-07	20:51	-5	0.7	8.95	18.9	18.9	0	0	
2006-Mar-07	20:51	0	0.1	8.94	18.9	18.9	0	0	
2006-Mar-07	20:52	302	6.1	9.01	18.9	18.9	0	0	
2006-Mar-07	20:52	169	4.5	8.98	18.9	18.9	0	0	
2006-Mar-07	20:53	110	4.0	8.83	18.9	18.9	0	0	
2006-Mar-07	20:53	0	0.2	8.99	18.9	18.9	0	0	
2006-Mar-07	20:54	-5	0.1	9.00	18.9	18.9	0	0	
2006-Mar-07	20:54	-5	0.0	9.17	18.9	18.9	0	0	
2006-Mar-07	20:55	-5	0.0	8.92	18.9	18.9	0	0	
2006-Mar-07	20:55	-5	0.0	8.86	18.9	18.9	0	0	
2006-Mar-07	20:56	-5	0.0	8.83	18.9	18.9	0	0	
2006-Mar-07	20:56	-5	0.0	8.81	18.9	18.9	0	0	
2006-Mar-07	20:57	-5	0.0	8.58	18.9	18.9	0	0	
2006-Mar-07	20:57	0	25.0	-0.00	18.9	18.9	0	0	
2006-Mar-07	20:58	-5	0.1	4.35	18.9	18.9	0	0	
2006-Mar-07	20:58	-5	0.0	8.79	18.9	18.9	0	0	
2006-Mar-07	20:59	-5	0.0	8.58	18.9	18.9	0	0	
2006-Mar-07	20:59	-5	0.0	8.86	18.9	18.9	0	0	
2006-Mar-07	21:00	-5	0.0	8.80	18.9	18.9	0	0	
2006-Mar-07	21:00	-5	0.0	8.72	18.9	18.9	0	0	
2006-Mar-07	21:01	-5	0.0	8.70	18.9	18.9	0	0	
2006-Mar-07	21:01	-5	0.1	8.86	18.9	18.9	0	0	
2006-Mar-07	21:02	-5	0.1	9.01	18.9	18.9	0	0	
2006-Mar-07	21:02	-5	0.1	9.07	18.9	18.9	0	0	
2006-Mar-07	21:03	-5	0.0	9.14	18.9	18.9	0	0	

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Well			Field		Service Date		Customer		Job Number
HITCH G #4			HUGOTON		0666-Mar-07		OXY RESOURCE CALIFORNIA LLC		2205549309
Date	Time	Treating Pressure	Flow Rate	Density	CMT STG VOL	CMT VOL	0	0	Message
	24 hr clock	psi	bbf/min	lb/gal	bbf	bbf	0	0	
2006-Mar-07	21:03	-5	0.1	9.25	18.9	18.9	0	0	
2006-Mar-07	21:04	-5	0.2	9.36	18.9	18.9	0	0	
2006-Mar-07	21:04	-5	1.4	9.98	18.9	18.9	0	0	
2006-Mar-07	21:05	0	0.4	10.05	18.9	18.9	0	0	
2006-Mar-07	21:05	224	5.4	9.73	20.1	20.1	0	0	
2006-Mar-07	21:06								Reset Total, Vol = 10 bbl
2006-Mar-07	21:06	252	5.6	10.23	22.3	22.3	0	0	
2006-Mar-07	21:06	247	5.2	10.61	0.5	0.5	0	0	
2006-Mar-07	21:06	169	5.4	12.41	3.3	3.3	0	0	
2006-Mar-07	21:07	266	6.0	12.07	5.9	5.9	0	0	
2006-Mar-07	21:07	160	5.4	12.83	8.8	8.8	0	0	
2006-Mar-07	21:08	146	5.9	12.46	11.7	11.7	0	0	
2006-Mar-07	21:08	119	5.7	11.72	14.7	14.7	0	0	
2006-Mar-07	21:09	119	6.2	11.87	17.7	17.7	0	0	
2006-Mar-07	21:09	137	6.1	12.08	20.5	20.5	0	0	
2006-Mar-07	21:10	160	6.4	12.21	23.5	23.5	0	0	
2006-Mar-07	21:10	128	5.8	12.29	26.7	26.7	0	0	
2006-Mar-07	21:11	114	5.5	12.35	29.6	29.6	0	0	
2006-Mar-07	21:11	133	5.8	12.33	32.4	32.4	0	0	
2006-Mar-07	21:12	133	5.4	12.25	35.2	35.2	0	0	
2006-Mar-07	21:12	124	5.3	12.36	37.9	37.9	0	0	
2006-Mar-07	21:13	137	5.9	12.44	40.8	40.8	0	0	
2006-Mar-07	21:13	174	6.4	12.42	43.6	43.6	0	0	
2006-Mar-07	21:14	128	5.8	12.38	46.6	46.6	0	0	
2006-Mar-07	21:14	133	5.8	12.37	49.4	49.4	0	0	
2006-Mar-07	21:15	137	5.8	12.37	52.3	52.3	0	0	
2006-Mar-07	21:15	137	5.4	12.37	55.1	55.1	0	0	
2006-Mar-07	21:16	137	5.8	12.36	58.0	58.0	0	0	
2006-Mar-07	21:16	96	5.1	12.37	60.8	60.8	0	0	
2006-Mar-07	21:17	146	6.2	12.35	63.8	63.8	0	0	
2006-Mar-07	21:17	151	6.2	12.34	66.9	66.9	0	0	
2006-Mar-07	21:18	151	6.2	12.33	69.9	69.9	0	0	
2006-Mar-07	21:18	151	6.1	12.27	72.9	72.9	0	0	
2006-Mar-07	21:19	128	5.7	12.24	75.9	75.9	0	0	
2006-Mar-07	21:19	151	6.2	12.36	78.9	78.9	0	0	
2006-Mar-07	21:20	101	5.0	12.35	81.9	81.9	0	0	
2006-Mar-07	21:20	174	5.3	13.24	83.9	83.9	0	0	
2006-Mar-07	21:20								Reset Total, Vol = 83.86 bbl
2006-Mar-07	21:20								End Lead Slurry
2006-Mar-07	21:20	110	5.3	13.33	0.3	0.3	0	0	
2006-Mar-07	21:20	160	5.3	13.37	0.4	0.4	0	0	
2006-Mar-07	21:20								Start Mixing Tail Slurry
2006-Mar-07	21:20	224	5.4	13.47	0.6	0.6	0	0	
2006-Mar-07	21:21	229	5.9	14.08	3.6	3.6	0	0	
2006-Mar-07	21:21	247	6.1	14.18	6.5	6.5	0	0	
2006-Mar-07	21:22	243	5.9	14.14	9.5	9.5	0	0	
2006-Mar-07	21:22	229	5.9	14.08	12.4	12.4	0	0	
2006-Mar-07	21:23	247	5.9	14.05	15.3	15.3	0	0	
2006-Mar-07	21:23	233	5.8	14.02	18.3	18.3	0	0	
2006-Mar-07	21:24	252	5.9	14.04	21.2	21.2	0	0	
2006-Mar-07	21:24	238	5.9	14.04	24.2	24.2	0	0	
2006-Mar-07	21:25	233	5.9	14.06	27.1	27.1	0	0	
2006-Mar-07	21:25	238	5.8	13.98	30.0	30.0	0	0	
2006-Mar-07	21:26	224	5.9	13.93	32.9	32.9	0	0	

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Well		Field		Service Date		Customer		Job Number	
HITCH G #4		HUGOTON		0666-Mar-07		OXY RESOURCE CALIFORNIA LLC		2205549309	
Date	Time	Treating Pressure	Flow Rate	Density	CMT STG VOL	CMT VOL	0	0	Message
	24 hr clock	psi	bbl/min	lb/gal	bbl	bbl	0	0	
2006-Mar-07	21:26	229	5.9	13.97	35.9	35.9	0	0	
2006-Mar-07	21:27	233	5.7	14.03	38.8	38.8	0	0	
2006-Mar-07	21:27	110	3.5	14.36	41.3	41.3	0	0	
2006-Mar-07	21:28	119	3.8	14.25	43.1	43.1	0	0	
2006-Mar-07	21:28	-14	1.9	13.86	44.7	44.7	0	0	
2006-Mar-07	21:28								Reset Total, Vol = 44.67 bbl
2006-Mar-07	21:28	-14	1.2	13.81	0.1	0.1	0	0	
2006-Mar-07	21:28								End Tail Slurry
2006-Mar-07	21:28	-14	0.3	13.79	0.1	0.1	0	0	
2006-Mar-07	21:28	-14	0.1	13.79	0.1	0.1	0	0	
2006-Mar-07	21:28								Drop Top Plug
2006-Mar-07	21:28	-14	0.0	13.79	0.1	0.1	0	0	
2006-Mar-07	21:28								Start Displacement
2006-Mar-07	21:29	-9	0.0	11.51	0.1	0.1	0	0	
2006-Mar-07	21:29	69	0.0	10.73	0.1	0.1	0	0	
2006-Mar-07	21:30	215	5.1	9.15	1.7	1.7	0	0	
2006-Mar-07	21:30	174	5.0	8.47	1.7	1.7	0	0	
2006-Mar-07	21:31	146	5.1	8.28	1.7	1.7	0	0	
2006-Mar-07	21:31	151	4.9	8.36	1.7	1.7	0	0	
2006-Mar-07	21:32	151	4.9	8.36	1.7	1.7	0	0	
2006-Mar-07	21:32	5	0.0	8.35	1.7	1.7	0	0	
2006-Mar-07	21:33	0	0.0	8.35	1.7	1.7	0	0	
2006-Mar-07	21:33	69	5.1	8.34	3.0	3.0	0	0	
2006-Mar-07	21:34	64	5.4	8.35	5.7	5.7	0	0	
2006-Mar-07	21:34	64	5.4	8.36	8.4	8.4	0	0	
2006-Mar-07	21:35	64	5.7	8.36	11.2	11.2	0	0	
2006-Mar-07	21:35	64	5.7	8.35	14.0	14.0	0	0	
2006-Mar-07	21:36	64	5.7	8.35	16.9	16.9	0	0	
2006-Mar-07	21:36	110	4.8	8.35	19.4	19.4	0	0	
2006-Mar-07	21:37	146	4.7	8.35	21.8	21.8	0	0	
2006-Mar-07	21:37	206	4.6	8.35	24.1	24.1	0	0	
2006-Mar-07	21:38	256	4.6	8.35	26.4	26.4	0	0	
2006-Mar-07	21:38	293	4.6	8.35	28.8	28.8	0	0	
2006-Mar-07	21:39	334	4.6	8.35	31.0	31.0	0	0	
2006-Mar-07	21:39	398	4.6	8.35	33.3	33.3	0	0	
2006-Mar-07	21:40	462	4.6	8.35	35.6	35.6	0	0	
2006-Mar-07	21:40	485	4.6	8.35	37.9	37.9	0	0	
2006-Mar-07	21:41	554	4.6	8.35	40.2	40.2	0	0	
2006-Mar-07	21:41	513	3.6	8.35	42.4	42.4	0	0	
2006-Mar-07	21:42	572	2.4	8.35	43.7	43.7	0	0	
2006-Mar-07	21:42	591	2.4	8.35	44.9	44.9	0	0	
2006-Mar-07	21:43	623	2.4	8.35	46.1	46.1	0	0	
2006-Mar-07	21:43	655	2.4	8.35	47.3	47.3	0	0	
2006-Mar-07	21:44	668	2.4	8.35	48.5	48.5	0	0	
2006-Mar-07	21:44	1515	0.1	8.35	49.5	49.5	0	0	
2006-Mar-07	21:45	1534	0.0	8.35	49.5	49.5	0	0	
2006-Mar-07	21:45	5	0.5	8.35	49.5	49.5	0	0	
2006-Mar-07	21:46	5	0.5	8.35	49.7	49.7	0	0	
2006-Mar-07	21:46								Bump Top Plug
2006-Mar-07	21:46	5	0.5	8.35	49.7	49.7	0	0	
2006-Mar-07	21:46								End Displacement
2006-Mar-07	21:46	5	0.5	8.35	49.7	49.7	0	0	
2006-Mar-07	21:46	5	0.5	8.35	49.7	49.7	0	0	

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Well HITCH G #4		Field HUGOTON		Service Date 0666-Mar-07		Customer OXY RESOURCE CALIFORNIA LLC		Job Number 2205549309	
Date	Time	Treating Pressure	Flow Rate	Density	CMT STG VOL	CMT VOL	0	0	Message
	24 hr clock	psi	bbbl/min	lb/gal	bbbl	bbbl	0	0	
2006-Mar-07	21:46								Reset Total, Vol = 47 bbl by tanks
2006-Mar-07	21:46								End Job
2006-Mar-07	21:46	5	0.5	8.35	0.0	0.0	0	0	
<b>Post Job Summary</b>									
Average Pump Rates, bpm					Volume of Fluid Injected, bbl				
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2		
5			6.5	140	20	5			
Treating Pressure Summary, psi					Breakdown Fluid				
Maximum	Final	Average	Bump Plug to	Breakdown	Volume	Density			
700		300	1500			8.34 lb/gal			
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		<input type="checkbox"/> Cement Circulated to Surface?	Volume			
%	139 bbl	47 bbl	°F		<input type="checkbox"/> Washed Thru Perfs	To	ft		
Customer or Authorized Representative			Schlumberger Supervisor			<input type="checkbox"/> CirculationLost		<input checked="" type="checkbox"/> Job Completed	
Fillpot, Greg			Grigoriev, Valeriy						

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**KCC WICHITA**

Client: Oxy USA  
 Well Name: Hitch  
 Well Number: G 4  
 Legal Location: Sec 33-T32S-R34W  
 County: Seward  
 State: KS

Job Number: 2205549309  
 Job Type: LS  
 Hole Size: 7 7/8  
 Casing Size: 4 1/2  
 Total Depth: 3062  
 DV Tool @

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**Fluid Systems**

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<b>Mud:</b>	9 lb/gal	20 bbl			
weight:	9 lb/gal				
height:	feet				

<b>Wash:</b>	20 bbl	CW100			
weight:	8.35 lb/gal	volumes:	112 cuft	slurry:	20 bbls
yield:	cuft/sk	height:	493 feet	water:	20 bbls
mix req:	gal/sk				

<b>Lead:</b>	235 sks	35/65 POZ/C + 6%D020 + 2%S001 + 0.25 pps D130			
weight:	12.2 lb/gal	volumes:	512 cuft	slurry:	91 bbls
yield:	2.18 cuft/sk	height:	2,249 feet	water:	69 bbls
mix req:	12.4 gal/sk			Thickening Time:	hr:min

<b>Tail:</b>	175 sks	50/50 POZ/H + 2%D020 + 3%M117 + 5 pps D042 + 5 pps D053 + 0.6%D112 + 0.25%D065 + 0.25%D046			
weight:	13.8 lb/gal	volumes:	271 cuft	slurry:	48 bbls
yield:	1.55 cuft/sk	height:	1,191 feet	water:	30 bbls
mix req:	7.24 gal/sk			Thickening Time:	hr:min

<b>Displacement:</b>	47.00 bbl	Fresh Water	density	8.33 lb/gal
Total:	47.00 bbl			

**Casing Data**

O.D.	4.500 inches	CSG vol:	0.0155 bbl/ft	Ann. vol:	0.0406 bbl/ft
I.D.	4 inches	OH vol:	0.0602 bbl/ft		4.3896 ft/cuft
Csg Wt:	Feet	volume	Shoe Joint Length		
0.016	11.6	3069.00	47.57 bbls.	Csg:	45.00 feet
0.077	36		0.00 bbls.	Shoe:	feet
0.077	36		0.00 bbls.	Collar:	feet

**Volumes**

Total Depth	3062 feet	7.00 Above Floor		
Total Pipe	3069 feet	47.57 bbls.	Open Hole	184.47 bbls.
Shoe Joint	45 feet	0.70 bbls.	Annulus	124.52 bbls.
Float Collar@	3024 feet	47.00 bbls.	Total Water	200 bbls needed

**Post Job Info**

TOC LEAD	0 ft	Final Diff. Pressure	psi	
TOC TAIL	1,878 ft	Bump Top Plug to	psi @ approx.	hours
Excess	50 %	Circulated	bbls to Surface	

Casing Wt (Air)	35,600 lbs.	Casing Area ID	12.5664 sq in.
Hyd PSI(Annulus)	2,046 psi	Hyd PSI(Casing)	1,342 psi
Csg Cross Sect.	3.3380 sq in.	#VALUE!	1,342
Bouyancy	6,830 lbs.	Casing Lift Pressure	2,290 psi
Hook Load	28,771 lbs.	Differential Lift Pressure	704 psi

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**KCC WICHITA**

Pressure Test: 2000 psi

Top Pressure : 1500 psi

20 bbl CW100

5 bbl Water Spacer

91 bbl Lead Slurry @ 12.2 ppg

48 bbl Tail Slurry @ 13.8 ppg

SDDP Wash lines

47 bbl Fresh Water Displacement

Bump Plug @ 1500 psi

Differential P = 704 psi

Lift Pressure = 2290 psi

Total Water Needed= 200 bbl