

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1100140

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM

WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #		API No. 15	
Name:		Spot Description:	
Address 1:			West
Address 2:		Feet from North / South Line of Se	ection
City: Sta	ate: Zip:+	Feet from East / West Line of Se	ection
		Footages Calculated from Nearest Outside Section Corner:	
		County:	
		Lease Name: Well #:	
		Field Name:	
3			
		Producing Formation:	
Designate Type of Completion:		Elevation: Ground: Kelly Bushing:	
New Well Re-E	Entry Workover	Total Depth: Plug Back Total Depth:	
		Amount of Surface Pipe Set and Cemented at:	. Feet
Gas D&A	ENHR SIGW	Multiple Stage Cementing Collar Used? Yes No	
OG	GSW Temp. Abd.	If yes, show depth set:	_ Feet
CM (Coal Bed Methane)		If Alternate II completion, cement circulated from:	
Cathodic Other (Core,	Expl., etc.):	feet depth to:w/st	x cmt.
If Workover/Re-entry: Old Well Info	o as follows:		
Operator:		Drilling Fluid Management Plan	
Well Name:		(Data must be collected from the Reserve Pit)	
Original Comp. Date:	Original Total Depth:	Chloride content: ppm Fluid volume:	hhle
Deepening Re-perf.	Conv. to ENHR Conv. to SWD		_ 0013
	Conv. to GSW	Dewatering method used:	
Plug Back:	Plug Back Total Depth	Location of fluid disposal if hauled offsite:	
Commingled	Permit #:	Operator Name:	
Dual Completion	Permit #:	Lease Name: License #:	
SWD	Permit #:		
ENHR	Permit #:	Quarter Sec TwpS. R East	-
GSW	Permit #:	County: Permit #:	
Spud Date or Date Read Recompletion Date	ched TD Completion Date or Recompletion Date		

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

	Side Two	
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	County:	

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 complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional She	eets)	Yes No		-	n (Top), Depth and		Sample
Samples Sent to Geolog	ical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted E (If no, Submit Copy)	Electronically	<pre> Yes □ No Yes □ No Yes □ No</pre>					
List All E. Logs Run:							
		CASING		ew Used			
		Report all strings set-	conductor, surface, inte	ermediate, producti	on, 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: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing Plug Back TD				
Plug Off Zone				

Shots Per Foot		PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated				Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)			Depth	
TUBING RECORD:	Siz	ze:	Set At:		Packer	At:	Liner R	un:	No	
Date of First, Resumed F	Product	ion, SWD or ENH	۲.	Producing N	_	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	ər	Bbls.	Gas-Oil Ratio	Gravity
									Ι	
DISPOSITIO	N OF C	BAS:			METHOD	OF COMPLE	TION:		PRODUCTION INTE	RVAL:
Vented Sold Used on Lease				Open Hole Perf. Dually (Submit.				Commingled (Submit ACO-4)		
(If vented, Subi	mit ACC									

Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	WFYOG 1-2
Doc ID	1100140

All Electric Logs Run

Dual Induction
Compensated Neutron
Micro
Sonic

Serial #	6806		
Comments	Time	Pressure	Temp.
	(Min.)	(psia)	(deg F)
	472.0	77.19	87.8
	473.5	73.08	87.9
	475.0	48.54	88.1
	476.5	48.47	88.2
	478.0	48.45	88.2
	479.5	44.96	88.3
	481.0	46.14	88.3
	482.5	46.15	88.3
	484.0	39.04	88.4
	485.5	31.85	88.5
	487.0	31.62	88.9
	488.5	31.59	89.0
	490.0	16.13	89.5
	491.5	16.03	89.8
	493.0	16.07	89.9
	494.5	13.64	89.1
	496.0	13.92	86.8
	497.5	14.11	80.1
	499.0	13.75	77.3
	500.5	13.74	78.0
	501.5	13.28	79.5

t

Serial # 6806	5			Serial # 68	06		
Comments	Time	Pressure	Temp.	Comments	Time	Pressure	Temp
	(Min.)	(psia)	(deg F)		(Min.)	(psia)	(deg F
	354.5	995.24	107.7		410.5	1292.21	96
	356.0	1003.65	107.7		412.0	1193.79	95
	357.5	1011.38	107.7		413.5	1201.11	94
	359.0	1018.85	107.7		415.0	1168.47	94
	360.5	1025.84	107.8		416.5	1102.88	93
	362.0	1032.54	107.8		418.0	1077.31	92
	363.5	1038.80	107.8		419.5	1000.26	92
	365.0	1044.88	107.8		421.0	989.03	92
	366.5	1050.57	107.8		422.5	957.37	92
	368.0	1055.95	107.9		424.0	900.99	92
	369.5	1061.16	107.9		425.5	912.04	91
	371.0	1065.95	107.9		427.0	907.08	91
	372.5	1070.71	107.9		428.5	906.78	91
	374.0	1075.27	107.9		430.0	906.46	91
	375.5	1079.45	108.0		431.5	867.40	91
	377.0	1083.61	108.0		433.0	870.02	92
	378.5	1087.65	108.0		434.5	864.45	91
	379.5	1090.14	108.0		436.0	857.56	91
	380.0	1082.44	108.0		437.5	832.77	91
End Shut-In(2)	380.5	1080.81	108.0		439.0	806.71	91
	381.0	1729.69	107.8		440.5	774.92	91
Final Hydro-static	381.5	1710.24	107.9		442.0	701.51	91
	382.0	1702.06	107.9		443.5	682.58	91
	383.5	1685.98	107.0		445.0	651.60	91
	385.0	1673.60	108.0		446.5	565.48	91
	386.5	1666.81	108.0		440.5	559.31	9 92
	388.0	1637.70	108.0 107.8		449.5	501.02 469.06	86
	389.5	1660.87			451.0		85
	391.0	1645.57	107.5		452.5	438.93	85
	392.5	1648.39	107.5		454.0	376.44	85
	394.0	1535.29	107.1		455.5	350.25	85
	395.5	1594.07	107.3		457.0	280.63	86
	397.0	1484.67	106.0		458.5	259.32	86
	398.5	1559.71	105.4		460.0	228.46	87
	400.0	1439.65	104.6		461.5	172.81	87
	401.5	1396.91	103.5		463.0	135.40	8
	403.0	1358.45	101.4		464.5	136.24	8
	404.5	1364.59	100.1		466.0	136.20	8
	406.0	1379.23	99.3		467.5	105.93	87
	407.5	1301.62	98.4		469.0	105.92	87
	409.0	1324.59	97.2		470.5	97.76	87

Printing every 3 samples

Serial # 680	06			Serial # 68	06		
Comments	Time	Pressure	Temp.	Comments	Time	Pressure	Temp
	(Min.)	(psia)	(deg F)		(Min.)	(psia)	(deg F
	236.5	104.88	104.7		293.0	136.76	106
	238.0	106.11	104.7		294.5	145.37	106
	239.5	103.02	104.7		296.0	154.83	106
	241.0	106.38	104.8		297.5	165.50	106
	242.5	108.14	104.8		299.0	177.25	106
	244.0	108.91	104.8		300.5	190.59	106
	245.5	109.37	104.9		302.0	205.51	106
	247.0	109.80	104.9		303.5	222.75	106
	248.5	110.50	105.0		305.0	242.38	106
	250.0	111.23	105.0		306.5	264.73	106
	251.5	106.11	105.0		308.0	289.99	106
	253.0	109.62	105.1		309.5	318.43	106
	254.5	110.04	105.1		311.0	349.84	106
	256.0	112.20	105.2		312.5	383.96	106
	257.5	113.81	105.2		314.0	420.65	106
	259.0	112.85	105.2		315.5	458.29	106
	260.5	112.78	105.3		317.0	496.13	106
	262.0	113.26	105.3		318.5	533.23	106
	263.5	113.75	105.4		320.0	568.70	106
	265.0	113.47	105.4		321.5	602.74	106
	266.5	114.23	105.4		323.0	634.44	107
	268.0	114.92	105.5		324.5	664.22	107
	269.5	115.55	105.5		326.0	692.08	107
	271.0	115.73	105.6		327.5	717.96	107
	271.0	116.13	105.6		329.0	742.61	107
	272.5	116.64	105.6		330.5	765.38	107
		117.34	105.7				
	275.5 277.0	117.80	105.7		332.0 333.5	786.81 807.30	107 107
	278.5	117.84	105.8		335.0	826.44	107
	280.0	118.57	105.8		336.5	844.47	107
	281.5	119.79	105.8		338.0	861.78	107
	283.0	119.82	105.9		339.5	877.78	107
	284.5	119.82	105.9		341.0	892.96	107
	286.0	120.11	106.0		342.5	907.44	107
	287.5	121.04	106.0		344.0	920.56	107
	289.0	120.82	106.0		345.5	933.40	107
	289.5	121.41	106.0		347.0	945.50	107
Shut-In(2)	290.0	121.44	106.1		348.5	956.60	107
	290.5	123.70	106.1		350.0	967.12	107
	291.0	126.16	106.1		351.5	977.18	107
	291.5	128.76	106.1		353.0	986.42	107

Printing every 3 samples

Serial # 6806	;			Serial # 680	6		
Comments	Time	Pressure	Temp.	Comments	Time	Pressure	Temp.
	(Min.)	(psia)	(deg F)		(Min.)	(psia)	(deg F)
	129.5	1734.19	102.2		180.0	141.62	102.7
	131.0	1716.08	102.3		181.5	153.92	102.8
	132.5	1705.67	102.3		183.0	168.26	102.9
	134.0	1696.83	102.4		184.5	184.97	102.9
	135.5	1700.99	102.4		186.0	204.51	103.0
	137.0	1699.24	102.4		187.5	228.12	103.0
	138.5	1706.70	102.4		189.0	256.49	103.1
	139.0	1704.84	102.4		190.5	290.29	103.2
	139.5	1702.63	102.3		192.0	330.22	103.3
Initial Hydro-static	140.0	1744.36	102.3		193.5	375.90	103.3
	140.5	1739.09	102.4		195.0	426.36	103.4
Open To Flow (1)	141.0	67.99	102.0		196.5	479.02	103.5
	141.5	69.75	102.0		198.0	530.74	103.5
	143.0	74.33	101.9		199.5	580.81	103.6
	144.5	76.77	101.9		201.0	627.61	103.7
	146.0	79.54	101.9		202.5	671.05	103.7
	147.5	80.84	101.9		204.0	711.46	103.8
	149.0	82.65	101.9		205.5	748.77	103.9
	150.5	84.36	101.9		207.0	782.87	103.9
	152.0	85.13	101.9		208.5	814.80	104.0
	153.5	79.51	102.0		210.0	844.13	104.0
	155.0	81.07	102.0		211.5	870.84	104.1
	156.5	82.55	102.0		213.0	895.96	104.2
	158.0	83.46	102.0		214.5	918.72	104.2
	159.5	84.04	102.1		216.0	939.68	104.3
	161.0	84.91	102.1		217.5	958.67	104.3
	162.5	85.48	102.1		219.0	976.22	104.4
	164.0	86.20	102.2		220.5	992.21	104.4
	165.5	86.71	102.2		222.0	1006.90	104.5
	167.0	87.37	102.3		223.5	1020.34	104.5
	168.5	87.95	102.3		225.0	1032.71	104.6
	170.0	88.64	102.4		226.5	1044.05	104.7
	170.5	88.68	102.4		228.0	1054.49	104.7
Shut-In(1)	170.0	89.67	102.4		228.5	1057.73	104.7
	171.5	91.82	102.4	End Shut-In(1)	228.5	1060.95	104.7
	171.5	91.82 94.17	102.4		229.0 229.5	123.84	104.7
	172.0	94.17	102.4	Open To Flow (2)	229.5	96.50	104.4
	172.5	96.47 103.85	102.4		230.0	96.50 97.95	104.5
	175.5	111.86	102.6		232.0	100.81	104.6
	177.0	120.81	102.6		233.5	102.28	104.6
	178.5	130.54	102.7		235.0	103.33	104.6

Printing every 3 samples

DRILL STEM TESTING - DATA LISTING



CAPTIVA

445 ONION BLVD SUITE 208 LAKEWOOD CO 80228

#1-3 WFYOG Job Ticket: 17730

DST#:1

Test Start: 2012 08 26 @ 20:46:48

Completio	in System	IS ATTN: CHARL	IE STURDAVAI	NT	Test Start: 2012.0	08.26 @ 20:46:48	
Serial # 68	06			Serial # 68	306		
Comments	Time	Pressure	Temp.	Comments	Time	Pressure	Temp
	(Min.)	(psia)	(deg F)		(Min.)	(psia)	(deg F
	1.0	13.75	79.7		80.0	948.68	92
	4.0	13.74	83.5		81.5	997.84	93
	7.0	13.80	84.4		83.0	1019.53	93
	10.0	13.73	84.8		84.5	1050.12	93
	13.0	13.68	84.8		86.0	1115.75	94
	16.0	13.65	84.8		87.5	1142.28	94
	19.0	13.60	85.1		89.0	1169.20	95
	22.0	13.62	86.9		90.5	1241.75	95
	25.0	15.09	91.4		92.0	1263.11	95
	28.0	30.67	92.3		93.5	1355.05	95
	31.0	46.33	92.5		95.0	1408.21	96
	34.0	36.50	92.1		96.5	1358.00	96
	37.0	47.31	92.4		98.0	1385.31	97
	40.0	46.59	92.4		99.5	1525.45	97
	43.0	76.69	91.7		101.0	1477.25	98
	46.0	106.87	91.0		102.5	1533.60	98
	49.0	143.65	91.0		104.0	1571.32	99
	52.0	134.79	90.7		105.5	1560.03	99
	55.0	206.55	89.7		107.0	1550.63	99
	58.0	319.64	89.2		108.5	1552.65	99
	60.5	412.08	89.4		110.0	1580.58	99
	62.0	454.96	89.6		111.5	1597.27	100
	63.5	501.43	89.9		113.0	1616.04	100
	65.0	564.41	90.2		114.5	1635.26	10
	66.5	636.76	90.3		116.0	1650.82	10 ⁻
	68.0	651.28	90.6		117.5	1638.01	10'
	69.5	744.38	90.9		119.0	1628.50	101
	00.0		00.0		110.0		.0

91.3

91.8

92.5

93.1

92.9

92.9

Printing every 3 samples

71.0

72.5

74.0

75.5

77.0

78.5

742.63

776.38

837.80

868.64

975.45

957.83

1663.96

1680.67

1691.79

1713.46

1699.99

61.10

101.4

101.5

101.8

102.1

102.2

101.7

120.5

122.0

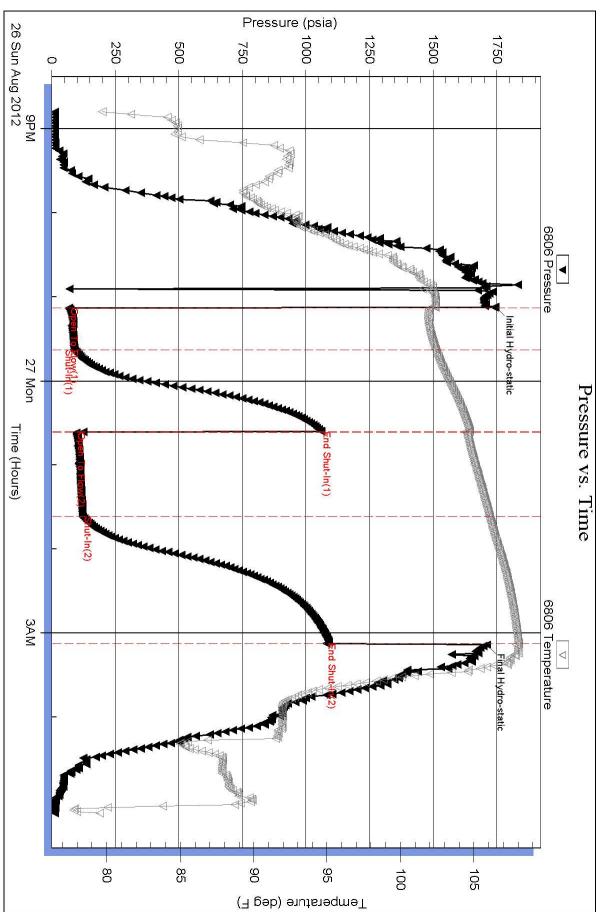
123.5

125.0

126.5

128.0

Printed: 2012.08.26 @ 20:59:56



Serial #: 6806

CAPTINA

#1-3 WFY OG

DST Test Number: 1

V		DRILL STEM TEST REPOR	RΤ	I		JMMAR
•		CAPTIVA				
Weatherford® Completion Systems		445 ONION BLVD SUITE 208 LAKEWOOD CO #1-3 W		YOG		
		80228	Job Ticket:	17730	DST#:1	
		ATTN: CHARLIE STURDAVANT	Test Start: 2012.08.26 @ 20:46:48			
Mud and Cu	ushion Information					
Mud Type: G	el Chem	Cushion Type:		Oil A PI:		deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:		ppm
Viscosity:	41.00 sec/qt	Cushion Volume:	bbl			
Water Loss:	9.60 in ³	Gas Cushion Type:				
Resistivity:	ohm.m	Gas Cushion Pressure:	psia			
Salinity:	66000.00 ppm					
Filter Cake:	inches					

Recovery Information

Recovery Table

			-		
	Length ft		Description		Volume bbl
	30.00	MUD 100%	6 MUD		0.148
	120.00	OILY CUT	MUD 3%OIL 97 %M	JD	0.590
Tot	al Length: 150	.00 ft	Total Volume:	0.738 bbl	
Lat	m Fluid Samples: 0 poratory Name: covery Comments:		Num Gas Bombs: Laboratory Location	0 n:	Serial #:

		DRII	TOOL DIAGRAM			
•		CAPTIV	A			
Maathar	ford®	445 ON	ION BLVD SUITE 208 LAKEW	OOD CO	#1-3 WFYOG	
Weatherford®		80228			Job Ticket: 17730	DST#:1
Completion	Systems	ATTN:	CHARLIE STURDAVANT	20:46:48		
Tool Information		ļ				
Drill Pipe: Leng	th: 3258.00 ft	Diameter:	3.88 inches Volume:	47.65 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe: Leng	th: 0.00 ft	Diameter:	0.00 inches Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar: Lenç	th: 240.00 ft	Diameter:	2.25 inches Volume:	1.18 bbl	Weight to Pull Loose:	70000.00 lb
Drill Ding Above KB	2.00 ft		Total Volume:	48.83 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB: Depth to Top Packer:	2.00 ft 3524.00 ft				String Weight: Initial	66000.00 lb
Depth to Bottom Packer					Final	68000.00 lb
nterval betw een Packe						
Tool Length:	85.00 ft					
Number of Packers:	2	Diameter:	6.75 inches			
Tool Comments:						

Tool Description	Length (ft) S	erial No. F	Position	Depth (ft)	Accum. Lengths	
S.I. Tool	5.00			3501.00		
HYD S.I. Tool	5.00			3506.00		
Jars	6.00			3512.00		
Safety Joint	2.00			3514.00		
Packer	5.00			3519.00	28.00	Bottom Of Top Packer
Packer	5.00			3524.00		
Perforations	5.00			3529.00		
C.O. Sub	0.75			3529.75		
DRILL PIPE	31.50			3561.25		
C.O. Sub	0.75			3562.00		
Perforations	14.00			3576.00		
Recorder	1.00			3577.00		
Recorder	1.00			3578.00		
Bullnose	3.00			3581.00	57.00	Bottom Packers & Anchor

Total Tool Length: 85.00

	DRILL STEM TES	ST REPO	JRT			
	CAPTIVA					
Weatherford®	445 ONION BLVD SUITE 208 LA 80228	KEWOOD CO		3 WFYO Ticket: 17		DST#:1
Completion Systems	ATTN: CHARLIE STURDAVAN	Т	Tes	t Start: 20)12.08.26 (@ 20:46:48
GENERAL INFORMATION:						
Formation:LKCDeviated:NoWhipstock:Time Tool Opened:23:07:48Time Test Ended:05:08:18	ft (KB)		Tes	ter:	Conventior DA VID 3345 49 M	nal Bottom Hole (Initial) RT
Interval:ft (KB) ToTotal Depth:3581.00 ft (KB) (THole Diameter:7.88 inches Hole	ft (KB) (TVD) VD) e Condition: Fair		Refe	erence Ele KB t	evations: to GR/CF:	1997.00 ft (KB) 1986.00 ft (CF) 11.00 ft
Serial #: 6806 Press@RunDepth: 121.44 psia Start Date: 2012.08.26 Start Time: 20:46:48	@ ft (KB) End Date: End Time:	2012.08.27 05:08:18	Capacity Last Calil Time On Time Off	o.: Btm: 2		5000.00 psia 2012.08.26 5 @ 23:06:48 7 @ 03:08:18
60-FINIAL OPEN	TIN VERY WEAK SURFACE ING WEAK BLOW BUILT TO 7 INCH -IN VERY WEAK SURFACE	IES INTO WAT		RESSUE		MARY
6806 Pressure	전 6806 Temperature	Time	Pressure	Temp	Annotat	
1750 1000 1000 1000 1000 1000 1000 1000	105	(Min.) 0 1	(psia) 1744.36 67.99	(deg F) 102.35 102.01		
	100	31	89.67	102.40	Shut-In(1)
adStates(1)	- 96 ag	, 89 90	1060.95 96.50	104.72	End Shut Open To	
		150	121.44	106.06	Shut-In(2	:)
		241 242	1080.81 1710.24	108.03 107.87	End Shut Final Hyd	
9PM 27 Mon 3 Sun Aug 2012 Time (Hours)	3AM					
Recovery				Ga	s Rates	
Length (ft) Description	Volume (bbl)			Choke (i	inches) Pres	sure (psia) Gas Rate (Mcf/d
30.00 MUD 100% MUD	0.15					
120.00 OILY CUT MUD 3%OIL 9	7 %MUD 0.59					
	N Ref. No: 17730			Printed:		

ALPINE OIL SERVICES CORPORATION Ref. No: 17730



DRILL STEM TEST REPORT

Prepared For: CAPTIVA

445 ONION BLVD SUITE 208 LAKEWOOD CO 80228

ATTN: CHARLIE STURDAVANT

#1-3 WFYOG

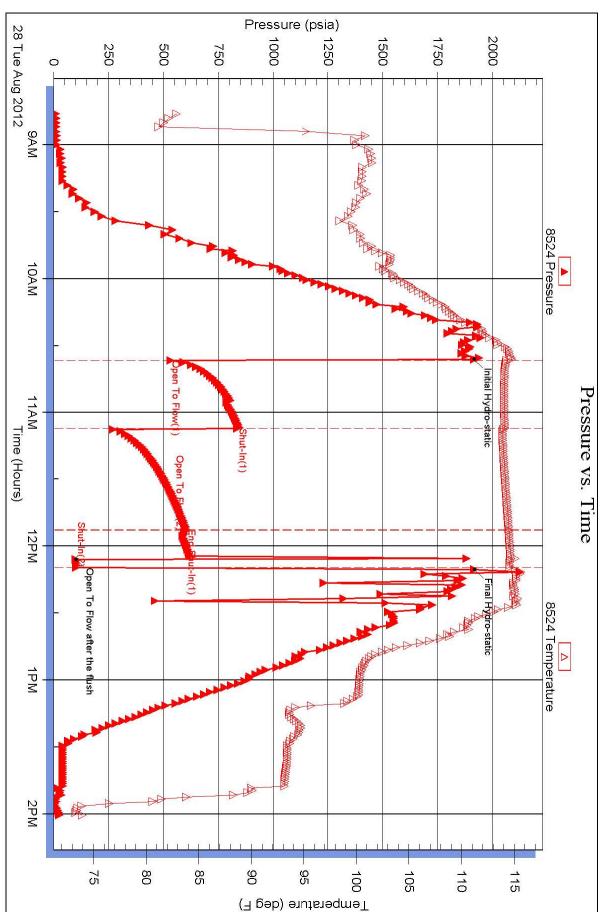
Start Date:	2012.08.26	@ 20:46:48	
End Date:	2012.08.27	@ 05:08:18	
Job Ticket #:	17730	DST #: 1	

ALPINE OIL SERVICES CORPORATION 2460, 240 - 4 Avenue S.W. Calgary, AB. T2P 4H4 ph: 263-7800 fax: 264-7260 CAPTIVA

Printed: 2012.08.26 @ 20:59:55

Printed: 2012.08.28 @ 00:37:05

ALPINE OIL SERVICES CORPORATION Ref. No: 17731



#1-2 WFY OG

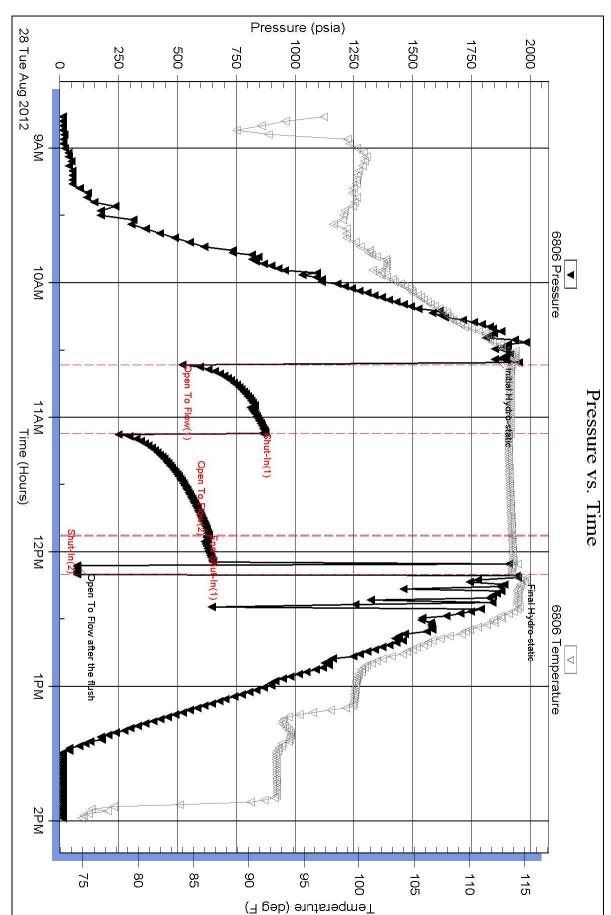
Serial #: 8524

Outside CAPTIVA II

DST Test Number: 2

Printed: 2012.08.28 @ 00:37:05

ALPINE OIL SERVICES CORPORATION Ref. No: 17731



#1-2 WFYOG

Serial #: 6806

Inside

CAPTIVA II

DST Test Number: 2

V	DRILL STEM TEST REPOR	DRILL STEM TEST REPORT					
•	CAPTIVA II						
Weatherford®	445 ONION BLVD SUITE 208 LAKEWOOD CO 80228	FYOG et: 17731	DST#:2				
Completion Systems	ATTN: CHARLIE STURDAVANT	Test Sta	Test Start: 2012.08.27 @ 00:00:00				
Mud and Cushion Information	1						
Mud Type: Gel Chem	Cushion Type:		Oil A PI:	deg API			
Mud Weight: 9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm			
Viscosity: 52.00 sec/qt	Cushion Volume:	bbl					
Water Loss: 8.80 in ³	Gas Cushion Type:						
Resistivity: ohm.m	Gas Cushion Pressure:	psia					
Salinity: 8400.00 ppm							
Filter Cake: 1.00 inches							

Recovery Information

Recovery Table

				,		
	Length ft			Description		Volume bbl
	20.0	00	Drilliong r	nud		0.098
Tot	al Length:	20	.00 ft	Total Volume:	0.098 bbl	
Nur	n Fluid Samples: ()		Num Gas Bombs:	0	Serial #:
Lab	oratory Name:			Laboratory Location	:	
-	•					

Recovery Comments:

V			DRILI	DRILL STEM TEST REPORT						
•			CAPTIVA	I						
Mosth	orfr	nrd [®]	445 ONIOI	N BLVD SUITE 208 LAKEW	OOD CO	#1-2 WFYOG				
Weatherford [®]			80228			Job Ticket: 17731	DST#:2			
Complet	ion S	ystems	ATTN: C	HARLIE STURDAVANT		Test Start: 2012.08.27 @	2 00:00:00			
Tool Information	on		ļ							
Drill Pipe:	Length:	3605.00 ft	Diameter:	3.80 inches Volume:	50.57 bbl	Tool Weight:	2000.00 lb			
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb			
Drill Collar:	Length:	180.00 ft	Diameter:	2.25 inches Volume:	0.89 bbl	Weight to Pull Loose:	85000.00 lb			
		E 00 ()		Total Volume:	51.46 bbl	Tool Chased	0.00 ft			
Drill Pipe Above		5.00 ft				String Weight: Initial	66000.00 lb			
Depth to Top Pad		3808.00 ft ft				Final	66000.00 lb			
Depth to Bottom Interval betw eer										
Tool Length:	I Fackers.	97.73 ft								
Number of Packe	are.	97.73 ft 2	Diameter:	6.75 inches						
Tool Comments:		2	Diameter.	0.70 1101163						

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool	5.00			3785.00		
Hydrolic Tool	5.00			3790.00		
Jars	6.00			3796.00		
Safety Joint	2.00			3798.00		
Packer	5.00			3803.00	28.00	Bottom Of Top Packer
Packer	5.00			3808.00		
Perforations	5.00			3813.00		
C.O. Sub	0.75			3813.75		
Drill Pipe	31.23			3844.98		
C.O. Sub	0.75			3845.73		
Perforations	27.00			3872.73		
Recorder	1.00	6806	Inside	3873.73		
Recorder	1.00	8524	Outside	3874.73		
Bullnose	3.00			3877.73	69.73	Bottom Packers & Anchor

Total Tool Length: 97.73

	DRILL STEM TE	ST REPO	ORT			
▼	CAPTIVA II					
Weatherford	445 ONION BLVD SUITE 208 80228	LAKEWOOD CO		2 WFYO Ticket: 17	-	DST#:2
Completion Systems	ATTN: CHARLIE STURDAVA	ANT)12.08.27 @ (-
Conglomerate Deviated: No Whipstock: ime Tool Opened: 00:00:00 ime Test Ended: 00:00:00	ft (KB)		Test Test Unit	er: (Conventional Gene Budig 3345 45	Bottom Hole (Initial)
nterval: 3808.00 ft (KB) To 38 Total Depth: 3878.00 ft (KB) (TN) 38 Iole Diameter: 7.88 inches Hole			Refe	erence Ele KB t	evations: to GR/CF:	1997.00 ft (KB) 1986.00 ft (CF) 11.00 ft
Gerial #: 8524 Outside tress@RunDepth: 604.15 psia start Date: 2012.08.28 start Time: 08:45:00	@ 3874.73 ft (KB)End Date:End Time:	2012.08.28 14:00:30	Capacity: Last Calib Time On E Time Off I	o.: Btm: 2	2 2012.08.28 @ 2012.08.28 @	
Pressure vs. T	5 Minutes-No blow flushed tool a				RE SUMMA	RY
2000 1750 1500		0 1 31 77 77 90 94 95	Pressure (psia) 1915.23 531.75 835.96 604.15 598.86 101.17 101.75 1917.38	Temp (deg F) 114.75 114.30 114.09 114.48 114.48 114.61 114.57 115.08	Open To Flo Shut-In(1) End Shut-In(Open To Flo Open To Flo Shut-In(2)	static w (1) 1) w (2) w after the flush
200 200 9AM 10AM 11AM Time (Hours)	рек то Роски сво воло 12РМ 1РМ 2РМ					
Recovery				Ga	s Rates	
Length (ft) Description 20.00 Drilliong mud	Volume (bbl) 0.10			Choke (i	inches) Pressure	(psia) Gas Rate (Mcf/d)

DRILL STEM TES	IKEN	JRI		
CAPTIVA II				
445 ONION BLVD SUITE 208 LAF 80228	KEWOOD CO			DST#:2
ATTN: CHARLIE STURDAVANT			-	-
ft (KB)		Test Typ Tester: Unit No:	e: Conventiona Gene Budig 3345 45	l Bottom Hole (Initial)
V D)		Reference	ce Elevations: KB to GR/CF:	1997.00 ft (KB) 1986.00 ft (CF) 11.00 ft
End Date: End Time:	13:58:30	Capacity: Last Calib.: Time On Btm: Time Off Btm:	2012.08.28	
5 Minutes-No blow flushed tool afte	r 10 minutes			ARY
Det To Plavatie tist fist 12PM 10 Plavatie tist fist 12P	Time (Min.) 0 3 33 79 79 92 96 97	(psia) (de 1850.65 11 521.08 11 860.46 11 633.10 11 624.31 11 74.35 11 73.51 11	g F) Initial Hydro 4.10 Initial Hydro 3.78 Open To FI 3.67 Shut-In(1) 3.83 End Shut-In 3.83 Open To FI 3.83 Open To FI 3.84 Open To FI 3.85 Shut-In(2)	o-static low (1) n(1) low (2) low after the flush
		I	Gas Rates	
Volume (bbl) 0.10		C	hoke (inches) Pressu	re (psia) Gas Rate (Mcf/d)
	445 ONION BLVD SUITE 208 LAP 80228 ATTN: CHARLIE STURDAVANT ft (KB) 878.00 ft (KB) (TVD) VD) e Condition: Fair @ 3873.73 ft (KB) End Date: End Time: 0 Minutes-Weak blow for 6 minutes 5 Minutes-No blow back 5 Minutes-No blow flushed tool afte	445 ONION BLVD SUITE 208 LAKEWOOD CO 80228 ATTN: CHARLIE STURDAVANT ft (KB) 878.00 ft (KB) (TVD) VD) e Condition: Fair @ 3873.73 ft (KB) End Date: 2012.08.28 End Time: 13:58:30 0 Minutes-Weak blow for 6 minutes and died 5 Minutes-No blow back 5 Minutes-No blow flushed tool after 10 minutes Time 0 Strategy of the second sec	445 ONION BLVD SUITE 208 LAKEWOOD CO 80228 #1-2 W Job Ticke ATTN: CHARLIE STURDAVANT Test Star ft (KB) Test Typ Tester: Unit No: 878.00 ft (KB) (TVD) Reference VD) e Condition: Fair @ 3873.73 ft (KB) Capacity: End Date: 2012.08.28 Last Calib.: Time Off Btm: 0 Mnutes-Weak blow for 6 minutes and died 5 Minutes-No blow back Time Off Btm: 0 Mnutes-Weak blow for 6 minutes and died 5 Minutes-No blow flushed tool after 10 minutes no help pulled the Time Treessure (pisa) (de (de (mage)) 0 Minutes-No blow flushed tool after 10 minutes no help pulled the Time Treessure (pisa) 133 860.46 11 79 633.10 11 79 624.31 11 92 74.35 11 944.63 11 10 minutes (bbi) 10 minutes (bbi) 11 0 minutes (bbi) 11 0 minutes (bbi)	445 ONION BLVD SUITE 208 LAKEWOOD CO 80228 #1-2 WFYOG Job Ticket: 17731 ATTN: CHARLIE STURDAVANT Test Start: 2012.08.27 @ ft (KB) Test Type: Conventiona Tester: Gene Budig Unit No: 3345 45 878.00 ft (KB) (TVD) Reference Bevations: VD) Condition: Fair @ 3873.73 ft (KB) Capacity: End Date: End Date: 2012.08.28 13:58:30 Last Calib.: Time On Btm: 2012.08.28 to Time Off Btm: 2012.08 to Time Off Btm: 2012



DRILL STEM TEST REPORT

Prepared For: CAPTIVA II

445 ONION BLVD SUITE 208 LAKEWOOD CO 80228

ATTN: CHARLIE STURDAVANT

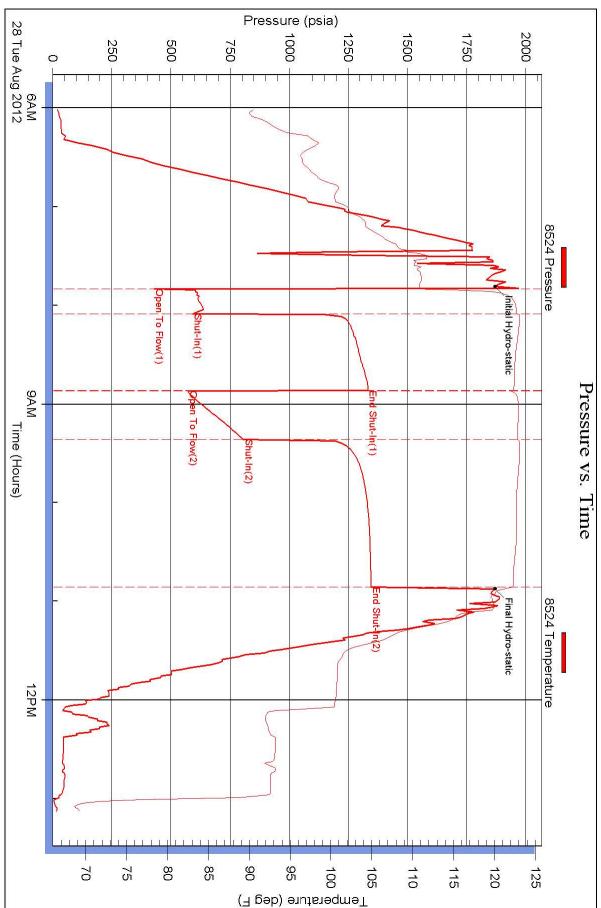
#1-2 WFYOG

Start Date:	2012.08.27 @	00:00:00	
End Date:	2012.08.27 @	00:00:00	
Job Ticket #:	17731	DST #:	2

ALPINE OIL SERVICES CORPORATION 2460, 240 - 4 Avenue S.W. Calgary, AB. T2P 4H4 ph: 263-7800 fax: 264-7260 **CAPTIVA II**

Printed: 2012.08.28 @ 23:12:46

Superior Testers Enterprises LLC Ref. No: 17732



Outside CAPTIVA II

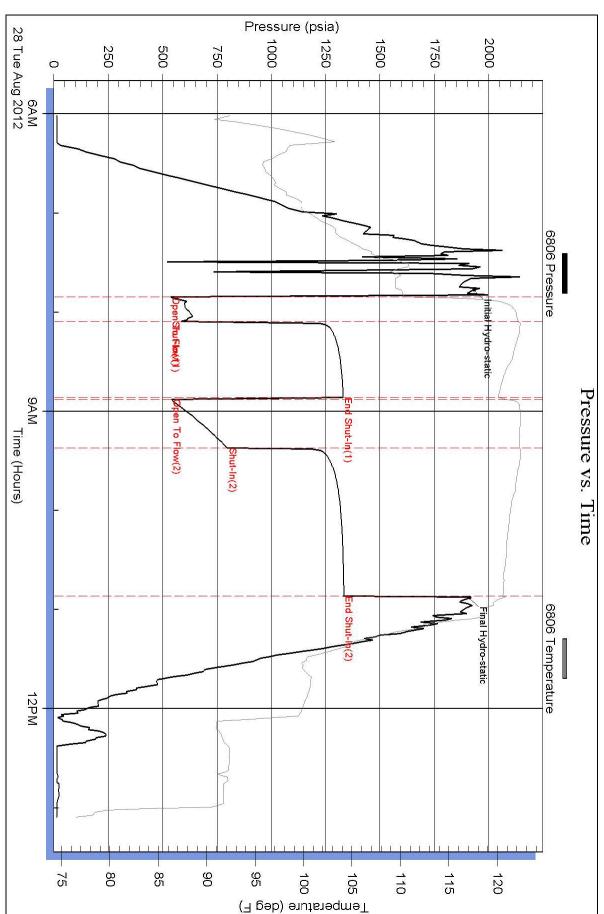
Serial #: 8524

#1-2 WFY OG

DST Test Number: 3

Printed: 2012.08.28 @ 23:12:46

Superior Testers Enterprises LLC Ref. No: 17732



Serial #: 6806

Inside

CAPTIVA II

#1-2 WFY OG

DST Test Number: 3

			LL STEM TEST REPOR		FLUI	D SUMMAR
ENTERPRISES	LLC	CAPTIN	VA II			
- COTEN		445 ON 80228	NION BLVD SUITE 208 LAKEWOOD CO	#1-2 WF Job Ticket:		#:3
		ATTN:	CHARLIE STURDAVANT	Test Start:	2012.08.28 @ 00:00:0	0
lud and Cushion	Information	ļ				
ud Type: Gel Chem			Cushion Type:		Oil A PI:	deg AP
	.00 lb/gal		Cushion Length:	ft	Water Salinity:	ppm
	.00 sec/qt		Cushion Volume:	bbl		
-	.99 in³		Gas Cushion Type:			
esistivity:	ohm.m		Gas Cushion Pressure:	psia		
	.00 ppm			P =		
•	.00 inches					
ecovery Informat	tion					
			Recovery Table			
	Leng	yth	Description	Volume	7	
	ft			bbl		
		360.00	Drilling Mud 100% Mud	3.4	0	
		180.00	Water Mud 70%Mud 30%Water	2.52	25	
		180.00	Muddy Water 10%Mud 90%Water	2.52		
		840.00	Water 100% Chlorides 28,000	11.78	33	
		840.00 0.00	Water 100% Chlorides 28,000 Resisitivity .28 @ 72 Degrees	11.78		
	Total Length:	0.00	Water 100% Chlorides 28,000 Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb	0.00		
	-	0.00 1560	Resisitivity .28 @ 72 Degrees0.00 ftTotal Volume:20.243 bb	0.00	0	
	Num Fluid Sam	0.00 1560 ples: 0	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0	0.00	0	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	
	Num Fluid Sam Laboratory Na	0.00 1560 ples: 0 me:	Resisitivity .28 @ 72 Degrees 0.00 ft Total Volume: 20.243 bb Num Gas Bombs: 0 Laboratory Location:	0.00 bl Serial	90 #:	

Ref. No: 17732

	PERIO			LL STE	MIEST	REPOF	र। 	TOOL DIAGRAI
ENTER	RPRISES LLC	:	CAPTIV	/A II				
	CTER?			ION BLVD SL	ITE 208 LAKE	WOOD CO	#1-2 WFYOG	
			80228				Job Ticket: 17732	DST#:3
			ATTN:	CHARLIE ST	URDAVANT		Test Start: 2012.08.28 @	2 00:00:00
Tool Information	on		ļ					
Drill Pipe:	Length:	3762.00 ft	Diameter:	3.80 in	ches Volume:	52.77 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 ind	ches Volume:	0.00 bbl	Weight set on Packer:	
Drill Collar:	Length:	180.00 ft	Diameter:	2.25 in	ches Volume:	0.89 bbl	Weight to Pull Loose:	
Drill Pipe Above I	ĸ₽∙	12.00 ft			Total Volume:	53.66 bbl	Tool Chased	280.00 ft
Depth to Top Pac		3958.00 ft					String Weight: Initial	61000.00 lb
Depth to Bottom		ft					Final	66000.00 lb
Interval between		8.00 ft						
Tool Length:		36.00 ft						
Number of Packe	ers:	2	Diameter:	6.75 in	ches			
Tool Comments:								
Tool Description	on	Le	ngth (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
			5.00			3935.00		
-			5.00			3940.00		
Shut-In Tool								
Shut-In Tool			6.00			3946.00		
Shut-In Tool Hydrolic Tool Jars			6.00 2.00			3946.00 3948.00		
Shut-In Tool Hydrolic Tool Jars Safety Joint							28.00	Bottom Of Top Packer
Shut-In Tool Hydrolic Tool Jars Safety Joint Packer			2.00			3948.00	28.00	Bottom Of Top Packer
Shut-In Tool Hydrolic Tool Jars Safety Joint Packer Packer			2.00 5.00			3948.00 3953.00	28.00	Bottom Of Top Packer
Shut-In Tool Hydrolic Tool Jars Safety Joint Packer Packer Perforations			2.00 5.00 5.00	6806	Inside	3948.00 3953.00 3958.00	28.00	Bottom Of Top Packer
Shut-In Tool Hydrolic Tool			2.00 5.00 5.00 3.00	6806 8524	Inside Outside	3948.00 3953.00 3958.00 3961.00	28.00	Bottom Of Top Packer

Total Tool Length:

36.00

	PERIA	DRILL STEM	TES	TREP	ORT				
		445 ONION BLVD SUITE	208 LAK	EWOOD CO	#1-	2 WFYC	G		
		80228			Job	Ticket: 1	7732	DST	#:3
		ATTN: CHARLIE STURD	AVANT		Tes	t Start: 20	012.08.2	8 @ 00:00:0	0
GENERAL IN	NFORMATION:								
Formation: Deviated: Time Tool Open Time Test Ende		ft (KB)			Tes	ter:	Convent Gene Bu 3345		Hole (Initial)
Interval: Total Depth: Hole Diameter:	3958.00 ft (KB) To 39 3966.00 ft (KB) (TV 7.88 inchesHole				Ref	erence El	evations: to GR/CF	1986	.00 ft (KB) .00 ft (CF) .00 ft
Serial #: 85 Press@RunDep Start Date: Start Time: TEST COMN	oth: 1346.84 psia 2012.08.28 06:00:00 IENT: 1st Opening 15 1st Shut-In 45 2nd Openiong 30	 3963.00 ft (KB) End Date: End Time: Minutes Fair blow built to t Minutes-No blow back Minutes-No blow built to t Minutes-No blow built to t 	he botto			b.: Btm: Btm: 5 minutes	2012.08 S	5000 2012.08 .28 @ 07:48 .28 @ 10:52	:30
	Pressure vs. Ti	me			P	RESSU	RESU	MARY	
2000 1720 1200 1200 700 600 600 600 600 600 600 6	BO24 Pressure	Part Temperature	Temperature (deg F) 125 20 115 110 10 10 66 90 90 86 90 77 70 70 70 70	Time (Min.) 0 2 17 63 64 93 183 183 184	Pressure (psia) 1869.74 429.15 591.10 1332.62 572.33 805.40 1346.84 1869.71	Temp (deg F) 110.84 110.40 122.73 122.33	Anno Initial H Open T Shut-Ir End Sh Open T Shut-Ir End Sh	Nation Nydro-static Fo Flow (1) n(1) nut-In(1) Fo Flow (2)	
	Recovery					Ga	s Rate	S	
Length (ft)	Description	Volume (bbl)				Choke (inches) P	ressure (psia)	Gas Rate (Mcf/d)
360.00	Drilling Mud 100% Mud	3.41							
180.00	Water Mud 70%Mud 30%		_						
	Muddy Water 10%Mud 90		_						
840.00	Water 100% Chlorides 28		_						
0.00	Resisitivity .28 @ 72 Deg	rees 0.00							

Superior Testers Enterprises LLC Ref. No: 17732

	PERI	DRILL ST	EMTES	TREP	ORT				
—————————————————————————————————————		CAPTIVA II							
	STER	445 ONION BLVD 80228	SUITE 208 LAK	KEWOOD CO	#1-	2 WFYC	G		
						Job Ticket: 17732			[#:3
		ATTN: CHARLIE	STURDAVANT	-	Tes	t Start: 20	012.08.28	3 @ 00:00:0	0
GENERAL IN	FORMATION:								
Formation: Deviated: Time Tool Open Time Test Ended		ft (KB)			Tes	ter:	Conventi Gene Bu 3345		Hole (Initial)
Interval: Total Depth: Hole Diameter:	3958.00 ft (KB) To 39 3966.00 ft (KB) (TV 7.88 inchesHole	,			Ref	erence Ele KB 1	evations: to GR/CF	1986	.00 ft (KB) .00 ft (CF) .00 ft
Serial #: 68 Press@RunDep Start Date: Start Time: TEST COMM	oth: 1332.39 psia 2012.08.28 06:00:00 IENT: 1st Opening 15 1st Shut-In 45 2nd Openiong 30	End Date: End Time:	built to the botto ack built to the botto			b.: Btm: Btm: 5 minutes	2012.08.: s	5000. 2012.08 28 @ 07:46 28 @ 10:53	:30
	Pressure vs. T	ime			PI	RESSUF		IMARY	
2000 1750 1900	BOOD Pressure	BSD Temperature	- 110 - 110 - 110 - 110 - 100 - 100 - 100 - 00 -	Time (Min.) 0 4 19 65 66 96 186 186 187	Pressure (psia) 1930.36 537.35 585.55 1330.22 541.07 796.83 1332.39 1909.47	Temp (deg F) 110.08 110.46 122.08 120.09	Annot Initial Hy Open T Shut-Ini End Shu Shut-Ini End Shu	ation /dro-static o Flow (1) (1) ut-In(1) o Flow (2) (2)	
	Recovery					Ga	s Rates	5	
Length (ft)	Description		me (bbl)			Choke (inches) Pr	essure (psia)	Gas Rate (Mcf/d)
	Drilling Mud 100% Mud	3.41							
	Water Mud 70%Mud 30%								
	Muddy Water 10%Mud 9								
	Water 100% Chlorides 2								
0.00	Resisitivity .28 @ 72 Deg	rees 0.00							
			_						



DRILL STEM TEST REPORT

Prepared For: CAPTIVA II

445 ONION BLVD SUITE 208 LAKEWOOD CO 80228

ATTN: CHARLIE STURDAVANT

#1-2 WFYOG

Start Date:	2012.08.28 @	00:00:00	
End Date:	2012.08.28 @	00:00:00	
Job Ticket #:	17732	DST #:	3

Superior Testers Enterprises LLC PO Box 138 Great Bend KS 67530 1-800-792-6902

	Scale 1:240 Imperia	al	
Well Name: Surface Location: Bottom Location:	# 1-2 WFYOG 847' FNL, 2069' FEL Sec 2 T2	2S R16W	
API: License Number:	15-145-21684-00-00		
Spud Date: Region:	8/22/2012 Pawnee County	Time:	4:30 AM
Drilling Completed: Surface Coordinates:	8/29/2012 1842712 & 548664	Time:	9:28 AM
Bottom Hole Coordinates: Ground Elevation:	2005.00ft		
K.B. Elevation: Logged Interval:	2016.00ft 2800.00ft	To:	4050.00ft
Total Depth: Formation: Drilling Fluid Type:	4050.00ft Arbuckle Chemical/Fresh Water Gel		
Company: Address:	OPERATOR Captiva II, LLC 445 Union Blvd., Suite 208 Lakewood, CO 80228		
Contact Geologist: Contact Phone Nbr: Well Name:	Janine M. Sturdavant 720-274-4682 / 303-907-2209 # 1-2 WFYOG		
Location: Pool:	847' FNL, 2069' FEL Sec 2 T2	2S R16W API: Field:	15-145-21684-00-00 Evers
State:	Kansas	Country:	USA

LOGGED BY



NOTES

The Captiva II # 1-2 WFYOG well was drilled to a LTD of 4050', bottoming in the Arbuckle. A TookeDAQ gas detector was employed during the drilling of all prospective formations. Shows of oil were noted in the Lansing A and B zones, and were DST'd with disappointing results. Shows of dead oil were detected in the Pennsylvanian Chert Conglomerate zone and was also DST'd, again with disappointing results. Shows of dead oil were also noted in the Simpson and live, free oil in the shale/detrital zone directly above the Arbuckle. The top 8' of the Arbuckle was DST'd, but proved to be wet.

After log analysis, it was determined by all parties involved that the well should be plugged and abandoned.

NOTE: It is apparent that the drill time and the Gamma Ray curve are off by 2 feet at all tops, therefore all DST intervals should be raised by 2 feet to accurately protray the true tested interval.

The dry samples were saved and will be available for review at the Kansas Geological Survey well sample library, located in Wichita, Kansas.

Respectfully submitted, Charlie Sturdavant Consulting Geologist

Well Comparison Sheet

		DRILLING W	ÆLL		COMPARISON WELL				· · · · · ·	COMPARISON WELL			
		Captiva II #1-2 WFYOG				Iron Drilling # 1 Shady "A"				Iron Drilling # 2 Shady "A"			
		847' FNL & 2	069' FEL			NE-NE-NE				NE-NW-NE			
		Sec. 2, T22S	R16W			Sec. 2, T22	2S R16W			Sec. 2, T22	2S R16W		
							Struct	tural			Struc	tural	
	2016	KB			1981	KB	Relatio	nship	1988	КВ	Relatio	onship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	
Anhydrite	996	1020	1010	1006	950	1031	-11	-25	978	1010	10	-4	
Howard	3057	-1041	3053	-1037	3016	-1035	-6	-2					
Topeka	3134	-1118	3130	-1114	3093	-1112	-6	-2	3104	-1116	-2	2	
Queen Hill	3309	-1293	3307	-1291	3270	-1289	-4	-2	3280	-1292	-1	1	
Heebner	3415	-1399	3414	-1398	3377	-1396	-3	-2	3388	-1400	1	2	
Toronto	3436	-1420	3429	-1413	3398	-1417	-3	4	3410	-1422	2	9	
Douglas	3452	-1436	3448	-1432	3414	-1433	-3	1	3423	-1435	-1	3	
Brown Lime	3522	-1506	3521	-1505	3487	-1506	0	1	3497	-1509	3	4	
Lansing	3530	-1514	3528	-1512	3493	-1512	-2	0	3510	-1522	8	10	
Muncie Creek	3645	-1629			3615	-1634	5		3627	-1639	10		
Stark Shale	3722	-1706	3720	-1704	3690	-1709	3	5	3696	-1708	2	4	
Base KC	3765	-1749	3768	-1752	3737	-1756	7	4	3748	-1760	11	8	
Marmaton	3788	-1772	3788	-1772	3758	-1777	5	5	3768	-1780	8	8	
Conglom Chert	3841	-1825	3844	-1828									
Simpson Shale	3880	-1864	3878	-1862	3848	-1867	3	5	3852	-1864	0	2	
Simpson Sand	3892	-1876	3888	-1872	3856	-1875	-1	3	3864	-1876	0	4	
Arbuckle	3960	-1944	3957	-1941	3916	-1935	-9	-6	3923	-1935	-9	-6	
Total Depth	4050	-2034	4050	-2034	3919	-1938	-96	-96	3933	-1945	-89	-89	

Daily Drilling Report

Charlie Sturdavant Consulting Well: # 1-2 WFYOG Company: Location: 847' FNL & 2069' FEL Sec. 2, T22S R16W 920 12th Street Golden, CO 80401 Pawnee County, KS Captiva II Office: 303-274-4682 Jim Waechter Cell: 303-478-3388 Elevation: 2016' KB 2005' GL Wellsite Geologist: Charlie Sturdavant Field: Wildcat API No.: 15-145-21684-0000 Cell: (303) 907-2295 Office: (303) 384-9481 Surface Casing: 8 5/8" set @ 1005' KB

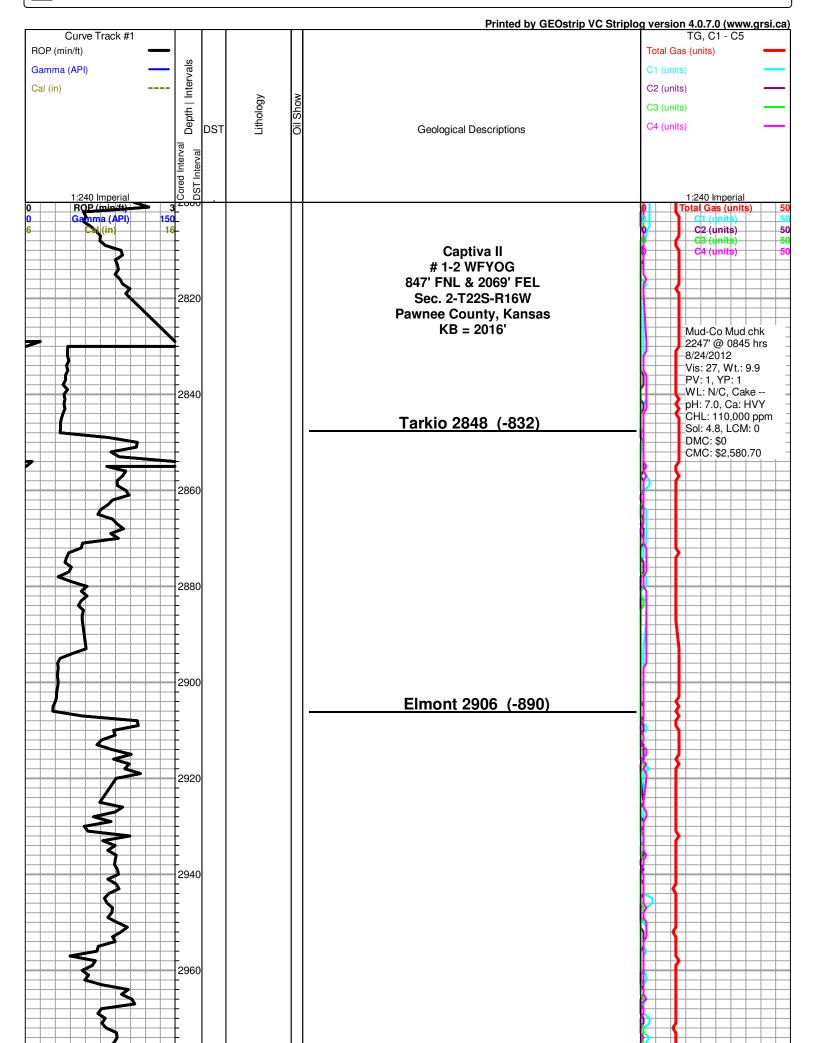
Drilling Contractor: Sterling Drilling Rig #2 620-388-5651, Tool Pusher: Uvaldo Martinez, cell: 620-388-1164

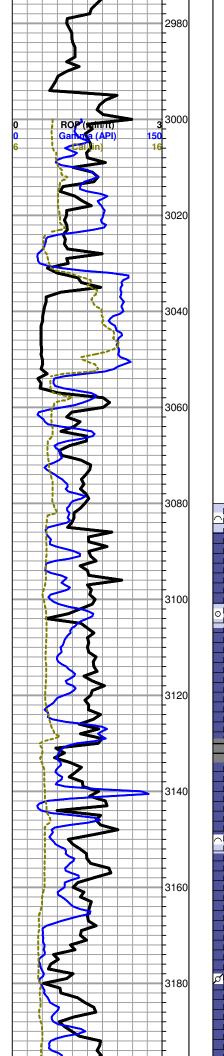
1	DATE	7:00 AM DEPTH	REMARKS
	8/22/2012	230 ft.	Drilling with 12-1/4" bit.
	8/23/2012	1006 #	WOO Set 24 juints of new 24# 9 5/9" surface seeing
	8/23/2012	1006 ft.	WOC. Set 24 joints of new 24# 8-5/8" surface casing.
	8/24/2021	2170 ft.	Drilling ahead.
			-
	8/25/2012	3020 ft.	Drilling ahead.
	0/06/0010	2561 4	Duilling shared Conducted DCT #1, 2524 2501' Dec. 20' mud 120' cil out mud

6/20/2012	3501 IL.	(3% oil, 97% mud), SIP: 1060-1080#.
8/27/2012	3694 ft.	Drilling ahead
8/28/2012	3894 ft.	CFS, gas kick and drilling break. DST # 2: 3803-3878', rec. 20' mud, SIP: 604#.
8/29/2012	3976 ft.	Circulating while repairing geolograph. DST # 3, 3958-3966'. Rec: 360' mud, 180' watery mud (70% mud), 180' muddy water (90% water), 840' water. SIP: 1330-1332#. Logging operations completed @ 1900 hrs. Geologist off location @ 2000 hrs.

	SURFACE CO-ORDINATES Well Type: Vertical Longitude: Latitude: N/S Co-ord: 1842712 E/W Co-ord: 548664
	CONTRACTORContractor:Sterling DrillingRig #:2Rig Type:mud rotarySpud Date:8/22/2012Time:4:30 AMTD Date:8/29/2012Rig Release:Time:
	ELEVATIONS K.B. Elevation: 2016.00ft Ground Elevation: 2005.00ft K.B. to Ground: 11.00ft
Cht vari Cht congl Dolsec	ROCK TYPES Lmst fw<7
MINERAL → Argillaceous ⊥ Calcareous △ Chert White ▲ Chert, dark ∴ Dolomitic P Pyrite • Sandy	ACCESSORIES FOSSIL STRAT./SED. STRUCTS STRINCER Bioclastic or Fragmental Stronod Shale Brachiopod Stylolite Shale Posoa Crinoids Stylolites Forsaminifera Fossils < 20%
	OTHER SYMBOLS
MISC Daily Report Digital Photo Document Folder Control Log File Horizontal Log File	DST Int DST at

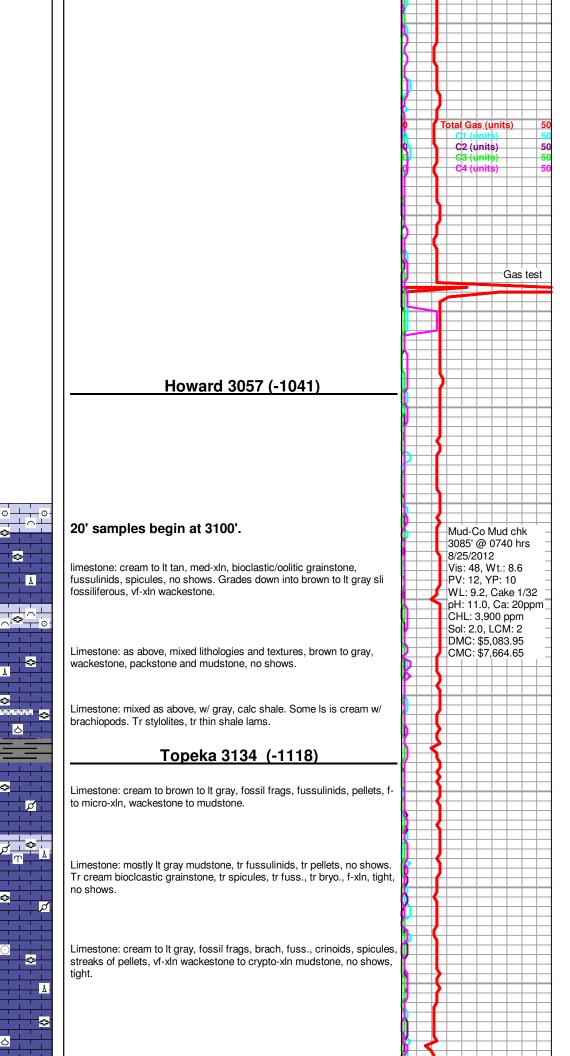
Core Log File

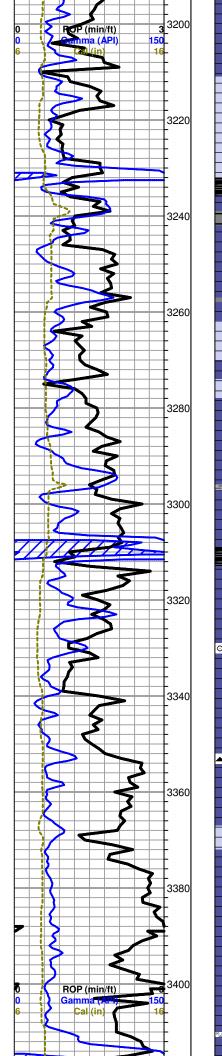


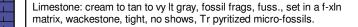


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otal Gas (units)

C2 (units)

C3 (units)

C4 (units)

Gas (units)

50

50

2 (units)

🔒 (units)

To

50

-5

Llimestone: cream to vy lt gray to tan, fossils, crin, brach, fuss, f- to med-xln, packstone, no shows, tr tan, fossiliferous, vitreous chert.

King Hill Shale 3232 (-1216)

Tr black shale, calc, fossil frags.

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Limestone: cream to tan, streaked to mottled, f-xln to micro-xln, granular texture, wackestone, tr thin shale lams.

Limestone: cream to tan, fossiliferous, spicules, brach., fussulinids, set in a f-xln matrix, tr pinpoint porosity, packstone to wackestone, no shows. Tr fossiliferous vitreous chert.

Limestone: cream to tan, f- to vf-xln, tr foss, fuss., crin., tr secondary micro-vuggy porosity, packstone to wackestone, no shows.

Limestone: as above w/ gray shale streaks. Tr fossiliferous, vitreous chert.

Queen Hill 3309 (-1293)

Shale: black, carbonaceous, dolomitic.

Limestone: It gray to tan, f-xln to vf-xln, tr isolated oolites, tr foss frags, tr inter-xln porosity, but most is tight, mudstone to wackestone, tr pyrite, no shows.

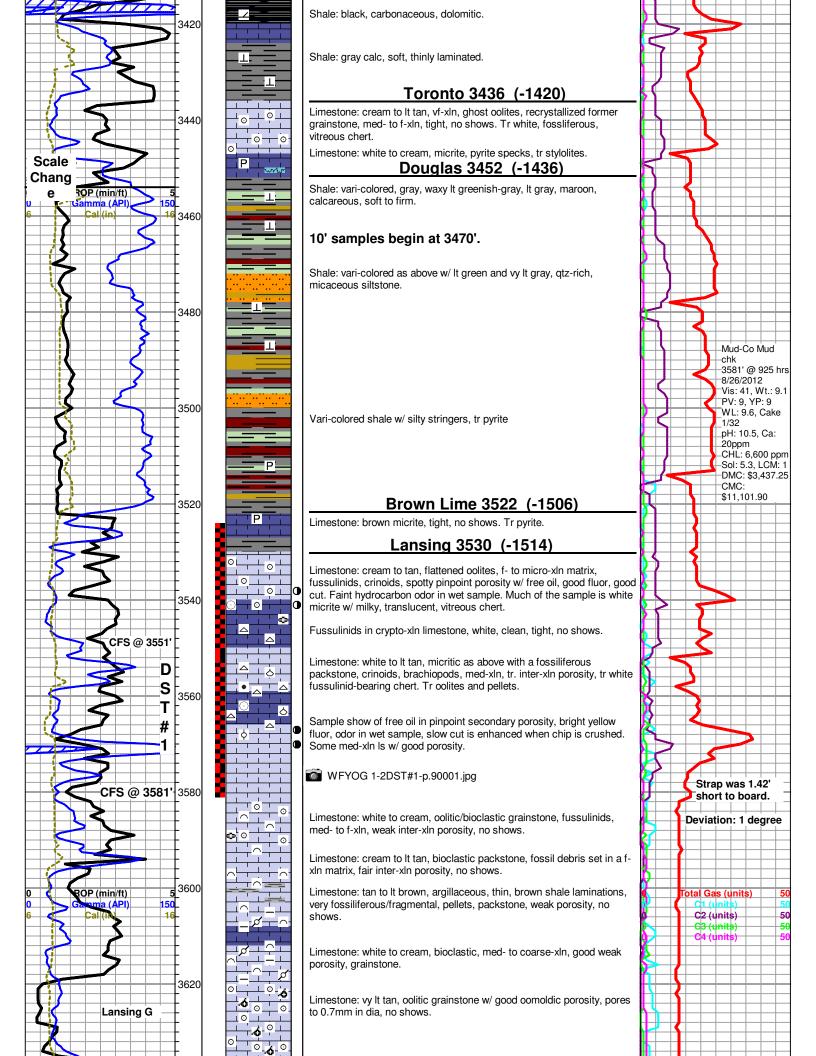
Limestone: cream to tan, succrosic to thinly laminated w/ brown shale, f- to med-xln, some frags are arg.,

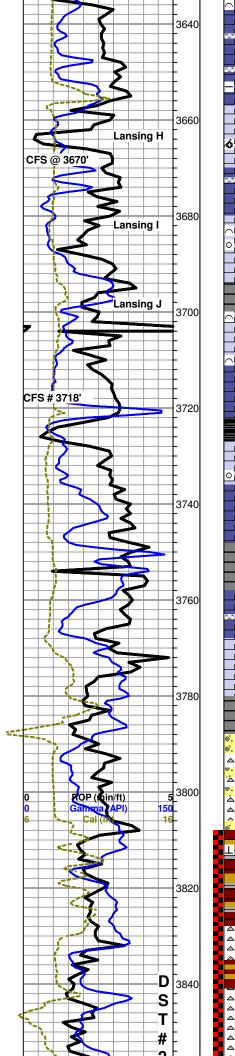
Limestone: cream to tan, streaks of oolitic grainstone w/ secondary crystallization, most is f-xln, sli succrosic recrystallized packstone to wackestone, local streaks of brown shale, tr lt gray to dark gray, fossiliferous, vitreous chert.

Limestone: white to cream, micro-xln, stylolites, tr ghost oolites, mudstone, tight, no shows. Tr lt gray chert.

Limestone: cream to brown, micritic to mudstone, tr fussulinids, stylolites, tr fossiliferous, vitreous dark brown to gray chert.

Heebner 3415 (-1399)





Limestone: cream to tan, bioclastic grainstone to mudstone, loosing porosity, becomming more mud-supported, no shows

Limestone: tan to brown, argillaceous, fossiliferous, packstone to wackestone w/ stylolites and thin brown shale laminations, tight, no shows. Fussulinids, forams, brachiopods, crinoids.

30 min sample: Limestone: vy lt tan, oolitic-oomoldic-bioclastic grainstone w/ very good porosity, but no shows. Crinoids, fussulinids, pellets.

Mud-Co Mud chk

3702' @ 0705 hrs

Vis: 52, Wt.: 9.1 PV: 14, YP: 11

WL: 8.8, Cake --

CHL: 8,400 ppm

Sol: 5.3. I CM: 1

DMC: \$687.70

CMC: \$11,789.60

Gas extractor is

Gas test

now turned on.

al Gas (units)

50

C2 (units)

C3 (units)

pH: 11.5, Ca: 20ppm

8/27/2012

Limestone: cream to vy It gray, crypto-xln, micrite w/ stylolites and thin brown shale laminations. No shows. Tr crinoid plates in shale.

Limestone: cream to vy It gray, oolitic, fossiliferous grainstone, med- to vf-xln w/ good inter-xln porosity, tr oomoldic por., no shows. Some oolites are well-cemented.

Shale: gray, calc, soft, fossil frags.

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Limestone: white, recrystallized bioclastic grainstone, good porosity, some finely succrosic, others are med-xln., no shows. Becomes micritic with depth.

Limestone: very It gray to It tan, crypto-xln micrite, tight, no shows.

Stark Shale 3722 (-1706)

Shale: black, carbonaceous, dolomitic.

Limestone: vy lt gray to white, oolitic grainstone, tr oomoldic porosity, no shows. tr white to milky, translucent, spicular chert.

Limestone: white to vy lt gray, crypto-xln micrite, tight, no shows.

Shale: gray to dark brown, fissile, thinly laminated, soft, dolomitic. Limestone: cream to reddish-brown to mottled and streaked, tr fossils, brach, tr oolites, tr stylolites, shallow water deposition, sli arg., mudstone to wackestone.

Base K/C 3765 (-1749)

Limestone: white to cream, fossiliferous, oolitic grainstone, diagenetically altered/recrystallized, ghost crinoids, tight, no shows.

Limestone: as above w/ reddish-brown shale streaks and stylolites. Increase in shale content, waxy greehish-gray, dark gray, calcareous.

Chertty conglomerate, pinkish-orange, brownish-orange, weathered, amber, tan, some is vitreous, some is frosted, shale as above.

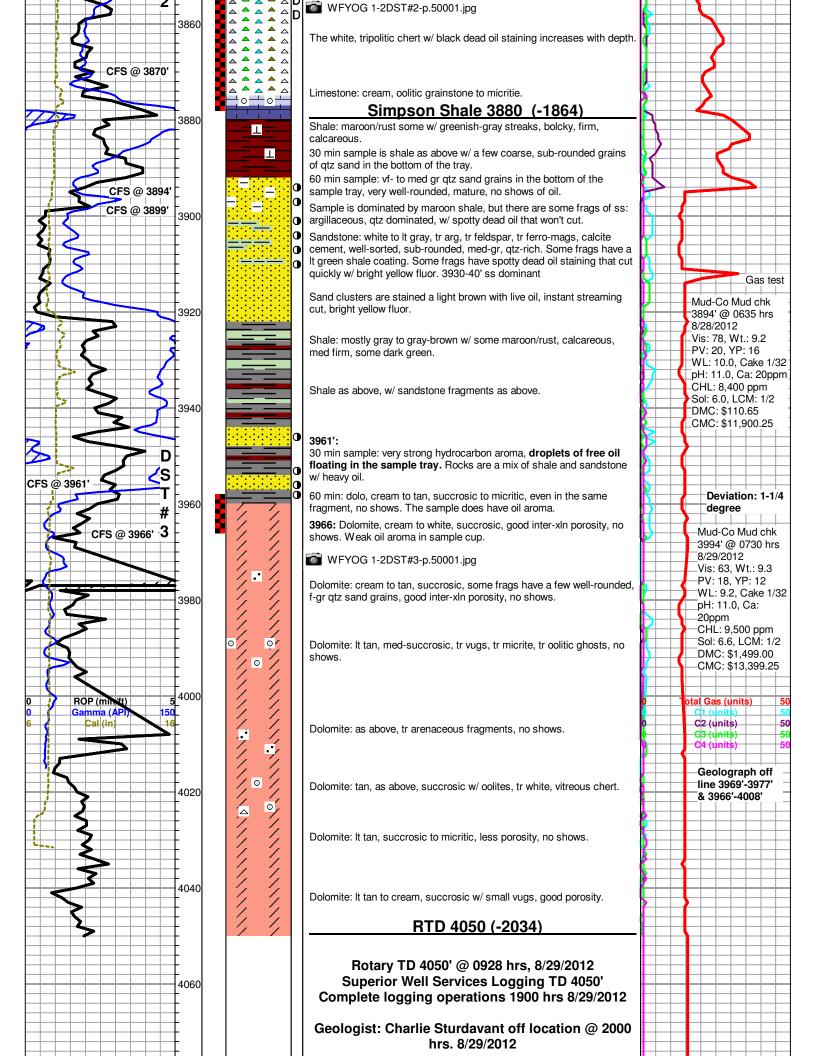
Chert as above, vari-colored, some is tripolitic.

Sample washes reddish-brown. Shale to shaley conglomerate. Varicolored shale: maroon, brown, reddish-brown/rust, calcareous.

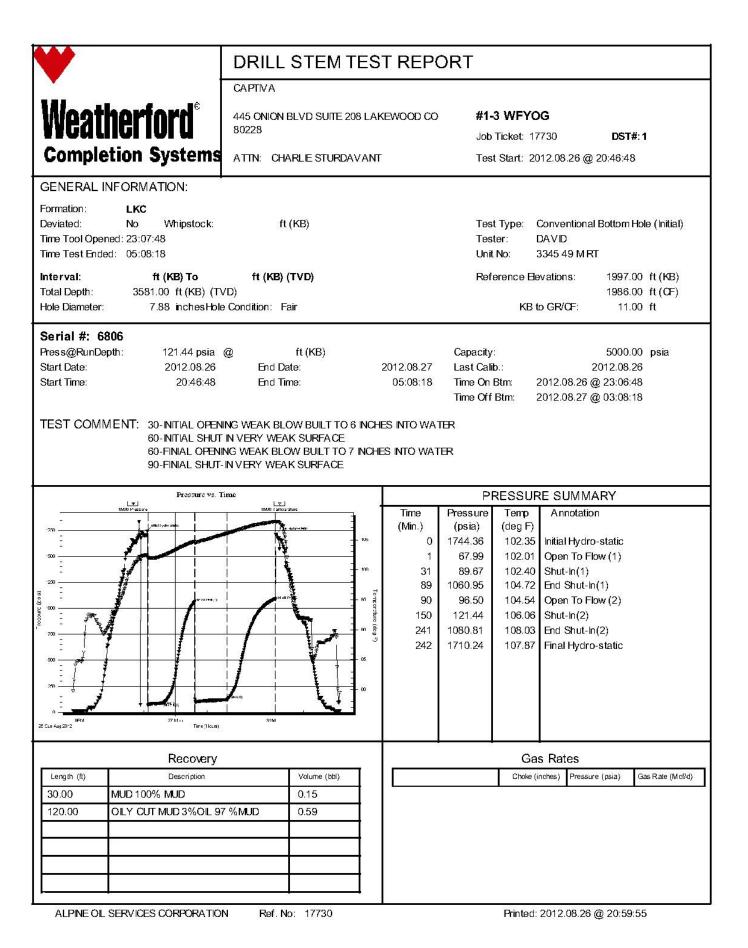
Mixed shales and cherts as above.

Cherty Conglomerate 3841 (-1825)

Chert: white, tripolitic w/ black splotches/dendrites of heavy to dead oil that cuts slowly. Vari-colored chert: amber, tan, orange. Oil is also D present in some of the colored chert. Oil aroma in sample cup. D

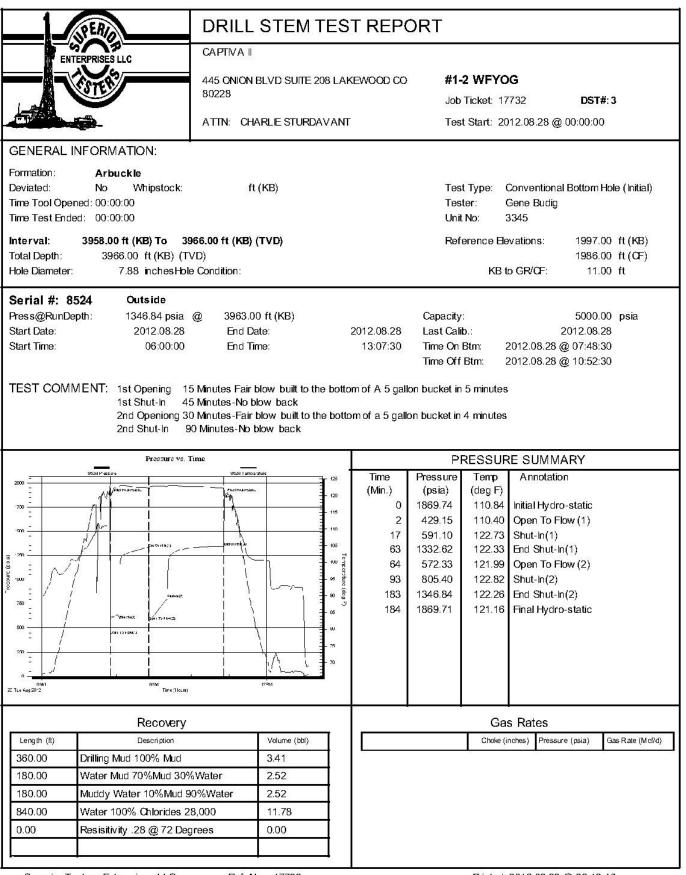


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	DRILL STEM TES	ST REPO	DRT				
•	CAPTIVA II						
Weatherford	445 ONION BLVD SUITE 208 L/ 80228	#1-2 WFYOG Job Ticket: 17731 DST#: 2					
Completion Systems	ATTN: CHARLIE STURDAVAN	п			012.08.27 @		
					30		
Formation: Conglomerate Deviated: No Whipstock: Time Tool Opened: 00:00:00 Time Test Ended: 00:00:00	ft (KB)		Tes	ter:	Conventiona Gene Budig 3345 45	al Bottom Hol	e (Initial)
interval: 3808.00 ft (KB) To 38 Total Depth: 3878.00 ft (KB) (TN Hole Diameter: 7.88 inchesHole			Ref	erence El	evations: to GR/OF:	1997.00 1986.00 11.00	ft (CF)
Serial #: 8524 Outside Press@RunDepth: 604.15 psia Start Date: 2012.08.28 Start Time: 08:45:00	@ 3874.73 ft (KB) End Date: End Time: Minutes-Weak blow for 6 minute	2012.08.28 14:00:30	Capacity Last Cali Time On Time Off	b.: Btm:	2012.08.28 2012.08.28	—	psia
2nd Openint 15 Pressure vs. T	Minutes-No blow flushed tool af	ter 10 minutes i		Cart (art) nan kons gewen (art) art	RE SUMM		
500 100 100 100 100 100 100 100		(Min.) 0 1 31 77 77 90 90 94 95	(psia) 1915.23 531.75 835.96 604.15 598.86 101.17 101.75 1917.38	(deg F) 114.75 114.30 114.09 114.48 114.48 114.61 114.57	Initial Hydr Open To F Shut-In(1) End Shut-I Open To F	o-static Flow (1) In(1) Flow (2) Flow after the	9 flush
Recovery	Volume (bbl)		1		IS Rates	ure (psia) Ga	as Rate (Mcf/
20.00 Drilliong mud	0.10				11036		
ALPINE OIL SERVICES CORPORATIO	N Ref. No: 17731					@ 00:37:05	

WFYOG 1-2DST#3-p.50001.jpg



Superior Testers Enterprises LLC

Printed: 2012.08.28 @ 23:12:46

요즘 법이 가지가 수 이었다. 영상(영금이 문화(영품))

QUALITY OILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Cell 785-324-1041		н	lome Office	P.O. B	ox 32 Ru	ssell, KS 67665	No	. 791				
	Sec.	Twp.	Range	100	County	State	On Location	Finish				
Date \$2212	a	22	16	Pause	Maria Indexed	KS		12:300.m.				
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Tool		Depth			City		State					
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Bulktrk 12 No. Driver	1.1.1	v	<u> </u>		Gel. 8	100	Licitatio Multi-	and the second				
	. /	& REMA	RKS		Calcium/6							
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Signature M. M.							Total Onlarg	Ĩ				

ALLIED OIL & GAS SERVICES, LLC 053881 Federal Tax I.D.# 20-5975804 REMIT TO P.O BOX 31 KUSSELL, KANSAS 67665 SERVICE POINT: medicine lodge KS DATE 08-30-12 02 TWP. RANGE CALLED OUT ON LOCATION JOB START JOB FINISH COUNTY LEASEWFYOG WELL #1-2 LOCATION 28/ \$ 19 5ct. STATE westaware 1.5 OLD OR NEW)(Circle one) Rd 80 infavore, Co. w & NANTO 1,03 CONTRACTOR Stepling #2 TYPE OF JOB Rotary Plug OWNER Captiva HOLE SIZE TK T.D. CEMENT CASING SIZE 854 AMOUNT ORDERED 220 SX 60:40:4% ge DEPTH/005 TUBING SIZE DEPTH DRILL PIPE 41 6#DEPTH 3960 TOOL DEPTH PRES. MAX 13258164 MINIMUM COMMON LLASSA 2145 MEAS, LINE SHOE JOINT POZMIX NI 88510 CEMENT LEFT IN CSG GEL 54@2 119 PERFS. CHLORIDE 0 DISPLACEMENT Fresh H20 & Dailling M. ASC a 55# EQUIPMENT flosen 0 po. 1610 0 PUMPTRUCK CEMENTER D. Felio 0 #548-545HELPER H. Piper Ø BULK TRUCK #356-2910 DRIVER T. BULK TRUCK Jake 0 @ J. He @ DRIVER # @ HANDLING 236.20 MILEAGE 9.87.23 @2 7.06 0 **REMARKS**: 310.58 256.62 TOTAL SERVICE Comput Did Gerec, -DEPTH OF JOB 396 PUMP TRUCK CHARGE 250. THX v EXTRA FOOTAGE @ MILEAGE @7 NA MANIFOLD @ Light Vehicle 6 @ @ CHARGE TO: Captiva 11 TOTAL 1536 -00 STREET 445 Union Blue Suite#208 CITY Lakewood STATE CO, ZIP 80228 PLUG & FLOAT EQUIPMENT 1 OTE Ø @ To: Allied Oil & Gas Services, LLC. @ You are hereby requested to rent cementing equipment Ø and furnish cementer and helper(s) to assist owner or @ contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or TOTAL contractor. I have read and understand the "GENERAL 485,24 TERMS AND CONDITIONS" listed on the reverse side. SALES TAX (If Any) TOTAL CHARGES 1169.32 IF PAID IN 30 DAYS PRINTED NAME 1) Jabo Mar DISCOUNT 20% 4677.26 SIGNATURE