

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

Operator: License # 4549

Name: ANADARKO PETROLEUM CORPORATION

Address P. O. BOX 351

City/State/Zip LIBERAL, KANSAS 67905-0351

Purchaser: ANADARKO ENERGY SERVICES

Operator Contact Person: DAVID W. KAPPLF

Phone (316) 624-6253

Contractor: Name: CHEYENNE DRILLING

License: 5382

Wellsite Geologist: _____

Designate Type of Completion

New Well Re-Entry Workover

Oil SWD SIOW Temp. Abd.

Gas ENHR SIGW

Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Deepening Re-perf. Conv. to Inj/SWD

Plug Back PBTD

Commingled Docket No. _____

Dual Completion Docket No. _____

Other (SWD or Inj?) Docket No. _____

10-16-97 10-28-97 11-25-97

Spud Date 10-16-97 Date Reached TD 10-28-97 Completion Date 11-25-97

API NO. 15- 129-21541

County MORTON

50'S. OF C. - NW - NE Sec. 1 Twp. 33 Rge. 41 X E W

710 Feet from NS (circle one) Line of Section

1980 Feet from EX (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE SE, NW or SW (circle one)

Lease Name RATZLAFF "C" Well # 2A

Field Name DUNKLE

Producing Formation MORROW

Elevation: Ground 3394 KB _____

Total Depth 6000 PBTD 5610

Amount of Surface Pipe Set and Cemented at 1510 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 Att. 1, 5-14-98 U.C.
(Data must be collected from the Reserve Pit)

Chloride content 1000 ppm Fluid volume 700 bbls

Dewatering method used DRY, BACKFILL & RESTORE LOCATION.

Location of fluid disposal if hauled offsite: _____

Operator Name _____

Lease Name _____ License No. _____

_____ Quarter Sec. _____ Twp. _____ S Rng. _____ E/W

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 67202, 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 on 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 L. Marc Harvey
L. MARC HARVEY
Title DRILLING TECHNICAL ASSISTANT Date 2-12-98

Subscribed and sworn to before me this 12th day of February
19 98.

Notary Public Freda L. Hinz
Date Commission Expires _____

FREDA L. HINZ
Notary Public - State of Kansas
My Appt. Expires 5-15-99

K.C.C. OFFICE USE ONLY		
F	<input type="checkbox"/>	Letter of Confidentiality Attached
C	<input checked="" type="checkbox"/>	Wireline Log Received
C	<input type="checkbox"/>	Geologist Report Received
<input checked="" type="checkbox"/>	KCC	ST. Distribution
<input type="checkbox"/>	KGS	SWD/Rep _____ NGPA
		Plug _____ Other _____
		(Specify)
		<u>FEB 17 1998</u>
		<u>2-17-1998</u>

SIDE TWO

Operator Name ANADARKO PETROLEUM CORPORATION Lease Name RATZLAFF "C" Well # 2A

Sec. 1 Twp. 33 Rge. 41 East County MORTON
 West

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem 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 during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datums	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHASE	2170	
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	COUNCIL GROVE	2460	
List All E.Logs Run: CBL-CCL-GR, DIL, ML, CNL-LDT, SONIC.		WABAUNSEE	2882	
		TOPEKA	3114	
		B/HHEBNER	3553	
		KANSAS CITY	3748	
		MARMATON	4236	
		CHEROKEE	4447	
		MORROW	4770	
		MISS UNCONFORMITY	5188	
		ST. LOUIS	5303	
		SPERGEN	5508	
		OSAGE	5736	
		KINDERHOOK	5955	

CASING RECORD							
<input checked="" 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
CONDUCTOR	17-1/2"	13-3/8"	48.0	520	CLASS C/ CLASS C.	220/125	16% GEL, 1/4%SK FLC/ 2%CC, 1/4%SK FLC.
SURFACE	12-1/4"	8-5/8"	23.0	1510	CLASS C/ CLASS C.	275/100	16% GEL, 3% SALT, 1/4%SK FLC/2%CC, 1/4% SK FLC.
PRODUCTION	7-7/8"	5-1/2"	15.5	5231	50/50 POZ/ 50/50 POZ.	25/260	.75% HALAD 322, 10% SALT, 1/4%SK FLC/SAME

ADDITIONAL CEMENTING/SQUEEZE RECORD					
Purpose:	Depth		Type of Cement	#Sacks Used	Type and Percent Additives
	Top	Bottom			
<input type="checkbox"/> Perforate					
<input type="checkbox"/> Protect Casing					
<input type="checkbox"/> Plug Back TD					
<input type="checkbox"/> 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)	
	Footage	Interval	Material	Depth
2	5114-5135.		ACID: 1100 GAL 7-1/2% FeHCL.	5114-5135
2	5062-5104.		ACID: 2100 GAL 7-1/2% FeHCL.	5062-5104
			FRAC: 39500 GAL FOAMED GEL & 114000#	5062-5135 (OA)
			16/30 SD.	
TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj. 12-31-97	Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)
Estimated Production Per 24 Hours	Oil Bbls. Gas Mcf 1024 Water Bbls. Gas-Oil Ratio Gravity

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: 5062-5135 (OA)

TRILOBITE TESTING L.L.C. 15-129-21541

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Test Ticket

No 9803

Well Name & No. Rafeloff "C" #2A Test No. 1 Date 10-24-97
 Company Anadarko Zone Tested Lower Morrow
 Address P.O. Box 351 Liberal, KS. 67905-0351 Elevation 3404 KB 3394 GL
 Co. Rep / Geo. Ed Grivies Cont. Cheyenne #7 Est. Ft. of Pay 18 Por. 7 %
 Location: Sec. 1 Twp. 33S Rge. 41W Co. MORTON State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 5042' - 5180' Initial Str Wt./Lbs. 116000 Unseated Str Wt./Lbs. 118,000
 Anchor Length 118' Wt. Set Lbs. 34000 Wt. Pulled Loose/Lbs. 140,000
 Top Packer Depth 5057' Tool Weight 1,800
 Bottom Packer Depth 5062' Hole Size — 7 7/8" x Rubber Size — 6 3/4" x
 Total Depth 5180' Wt. Pipe Run _____ Drill Collar Run 721'
 Mud Wt. 8.9 LCM 5 Vis. 47 WL 9.2 Drill Pipe Size 4 1/2 x-hole Ft. Run 4326'
 Blow Description FF - Steam flow, BOB in 4 min. Gas to surface 15 min.
ISI - Built to 2 in. in bucket.
4 - BOB soon as open.
FSI - Built to 3 in. in bucket.

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>5'</u> Feet Of <u>Gassy mud</u>	<u>5057'</u>	<u>545'</u>	
Rec. <u>300'</u> Feet Of <u>Gassy mud</u>			
Rec. <u>240'</u> Feet Of <u>Gassy mud</u>			
Rec. _____ Feet Of _____			
Rec. _____ Feet Of _____			

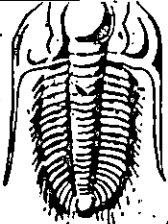
BHT 123 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1,000 ppm System

(A) Initial Hydrostatic Mud 2443 2474 PSI Recorder No. 3024 T-Started 12:15 AM
 (B) First Initial Flow Pressure 199 271 PSI (depth) 5065' T-Open 17:49 pm
 (C) First Final Flow Pressure 276 315 PSI Recorder No. 10993 T-Pulled 19:19 pm
 (D) Initial Shut-in Pressure 641 661 PSI (depth) 5180' T-Out 23:00 pm
 (E) Second Initial Flow Pressure 176 240 PSI Recorder No. _____
 (F) Second Final Flow Pressure 255 293 PSI (depth) _____
 (G) Final Shut-in Pressure 643 683 PSI Initial Opening 30 min Test Conventional
 Final Hydrostatic Mud 2359 2378 PSI Initial Shut-in 60 min Jars
Alpine API-1 Final Flow 60 min Safety Joint
 Final Shut-in 120 min Straddle _____

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND TO PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Ed Grivies
 Representative David Miller

Circ. Sub N/C
 Sampler
 Extra Packer _____
 Elect. Rec.
 Other _____
 TOTAL PRICE \$ Est 1400.00



HILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601 • (913) 625-4778

ORIGINAL

GAS VOLUME REPORT

Anadaeko

OPERATOR

Ratzliff "C" #2-A

WELL NAME AND NO.

DST NO. 1

1 st Flow				2 nd Flow			
MIn.	Ins. of Water PSIG	Orifice Size	MCF/D	MIn.	Ins. of Water PSIG	Orifice Size	MCF/D
5	4	.75	156	10	19	.75	384
10	4	.75	156	20	22	.75	404
15	4	.75	156	30	26	.75	473
				40	30	.75	522
				50	30	.75	522
				60	32	.75	534

Remarks: Gas well back.

FEB 17 1952

TRILOBITE TESTING L.L.C. ORIGINAL

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 9803 Date 10-24-97 ^{42, 10}
Company Name Andarko
Lease Ratzlaff "C" #2-A Test No. 1
County Morton Sec. 1 Twp. 33s Rng. 41w

SAMPLER RECOVERY

Gas 7 CU. Ft. ML
Oil _____ ML
Mud 3500 ML
Water _____ ML
Other _____ ML
Pressure .246 PSI
Total 4000 mL ML

PIT MUD ANALYSIS

Chlorides 1,000 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 47
Mud Weight 8.9
Filtrate 9.2
Other LCM 5,1bs

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

CONV. ACTION DIVISION
Hays, Kansas

DRILLERS LOG

ANADARKO PETROLEUM CORPORATION
RATZLAFF C-2A
SECTION 1-T33S-R41W
MORTON COUNTY, KANSAS

ORIGINAL

15-129-21541

COMMENCED: 10-15-97
COMPLETED: 10-02-97

SURFACE CASING: 1510' OF 8 5/8" CMTD
W/250 SKS PREMIUM PLUS + 3% CC + 1/4#/SK
FLOCELE. TAILED IN W/175 SKS PREMIUM
PLUS + 2% CC + 1/4 #/SK FLOCELE.

FORMATION

DEPTH

FORMATION	DEPTH
SURFACE HOLE	0 - 1510
RED BED	1510 - 1800
RED BED, LIMESTONE & SHALE	1800 - 2830
LIMESTONE & SHALE	2830 - 5420
LIMESTONE & ST. LOUIS	5420 - 5430
LIMESTONE & SHALE	5430 - 6000 RTD

I DO HEREBY CERTIFY THAT THE FOREGOING STATEMENTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

CHEYENNE DRILLING, INC.



WRAY VALENTINE

STATE OF KANSAS : ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 5TH DAY OF NOVEMBER, 1997.

JOLENE K. RUSSELL



NOTARY PUBLIC



STATE OF KANSAS COMMISSION

FEB 17 1998

COMMISSIONER



CEMENT JOB REPORT

ORIGINAL

CUSTOMER H WOODRICKO		DATE 10-16-97		F.R.# 086462		SERV. SUPV. Sheets						
LEASE & WELL NAME-OSG Mc 21694		C-2-A		LOCATION SEC 1-33 S-41W		COUNTY-PARISH-BLOCK MORNING, KS						
DISTRIBUTOR Schuyler		DRILLING/CONTRACTOR RIG # Schuyler 216 H7		TYPE OF JOB Cementing								
SIZE & TYPE OF PLUGS TOP 1 3/8" Hulse		LIST-CSG-HARDWARE Insert W/PL		PHYSICAL SLURRY PROPERTIES								
BITM		MATERIALS FURNISHED BY BJ		SLURRY WGT PPG	SLURRY YLD FT3	WATER GPS	PUMP TIME HR:MIN	BI SLURRY	BI MIX WATER			
220 SKS C + 160/6 Gel + 0.5% C/LH		746 FT3		11.4	3.09	20.9		133	109			
F/Flake + 30% Salt												
125 SKS C + 20% CACELZ + 0.25% SK		168 FT3		14.8	1.34	6.32		30	19			
C/110-Flake												
Available Mix Water		Bbl.		Available Displ. Fluid		Bbl.		TOTAL				
HOLE		TBG-CSG-D.P.		TBG-CSG-D.P.		COLLAR DEPTHS						
SIZE	% EXCESS	DEPTH	SIZE	WGT	TYPE	DEPTH	SIZE	STAGE				
17 1/2		535				13 3/8"	48#	1-555	47			
LAST CASING		PKR-CMT RET-BR PL-LINER		PERF. DEPTH		TOP CONN		WELL FLUID				
SIZE	WGT	TYPE	DEPTH	BRAND & TYPE	DEPTH	TOP	BITM	SIZE	THREAD	TYPE	WGT.	
								13 3/8"	8rd	1 1/2	8.4	
											9.5	
TBG	CAL DISPL VOL-Bbl.	CAL PSI	CAL MAX PSI	OP. MAX	MAX TBG PSI	MAX CSG PSI	DISPL FLUID	WATER SOURCE				
	CSG	CSG	TOTAL	BUMP PLUG	TO REV.	SO. PSI	RATED	OP.	RATED	OP.	TYPE	WGT.
	786		850									

EXPLANATION: TROUBLE SETTING TOOL RUNNING CSG, ETC: PRIOR TO CEMENTING:

PRESSURE/RATE DETAIL				EXPLANATION			
TIME HR:MIN	PRESSURE-PSI	PIPE	ANNULUS	RATE BPM	BI. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/>
24:00							CIRCULATING WELL-RIG <input type="checkbox"/> BJ <input type="checkbox"/>
15:26	2000					H2O	On location. Soft muds. Spot & pump lay line to B/L wait for Big in Annul casing. Casing landed. Hook pipe to Circulate. Hook pump to ensure test lenses.
15:24	200			5-6	10	H2O	Start Water Added
15:32	200			5-6	10	H2O	Start Cement
15:55	200			3-4	133	C	Start Tail Cement
16:03					30	C	All cement Shutdown. Drop plug
16:06	200				6	H2O	Start Slow Pump
16:18	200			2.5	68	H2O	Speed plug - Check float
16:21	750				78.4	H2O	Float Held
16:22							
				SERV. SUPV. <u>Sheets</u>			



CEMENT JOB REPORT

ORIGINAL

CUSTOMER: ANA DANKO	DATE: 10-17-97	F.R.#: 086463	SERV. SUPV: Sheets
LEASE & WELL NAME-OCGS: Katzlaff C-2A	LOCATION: Sec 1 33S 41W		COUNTY-PARISH-BLOCK: Morton, KS
DISTRICT: Perinton	DRILLING CONTRACTOR RIG #: Cheyenne Dr. #7	TYPE OF JOB: (Surface)	

SIZE & TYPE OF PLUGS		LIST-CSG-HARDWARE	PHYSICAL SLURRY PROPERTIES					
TOP	BTM		SLURRY WGT PPG	SLURRY YLD FT ³	WATER OPS	PUMP TIME HR:MIN	Bbl SLURRY	Bbl MIX WATER
8 5/8" Rubber		10s 4cent						
		1 Insert WIAFU 1cm TBSK						
MATERIALS FURNISHED BY BJ								
275 SKS C + 16% Gel + 3% Salt + .25# SK-Cello-Flake			11.4	3.39	20.9		166	137
932 #73								
100 SKS C + 2% CaCl₂ + .25# / SK Cello-Flake			14.8	1.34	6.32		24	15
134 #3								
Available Mix Water	Bbl.	Available Displ. Fluid	Bbl.				TOTAL	

HOLE			TBG-CSG-D.P.			TBG-CSG-D.P.			COLLAR DEPTHS			
SIZE	% EXCESS	DEPTH	SIZE	WGT.	DEPTH	SIZE	WGT.	DEPTH	SHOE	FLOAT	STAGE	
12 1/4"			8 5/8"	24#	KSS	1527	43'	1484				
LAST CASING			PKR-CMT RET-BR PL-LINER			PERF. DEPTH		TOP CONN		WELL FLUID		
SIZE	WGT	DEPTH	BRAND & TYPE		DEPTH	TOP	BTM	SIZE	THREAD	TYPE	WGT.	
13 3/8"	48#	KSS			335' / 520'			8 5/8"	8rd	Mud	9.5	
CAL DISPL VOL-Bbl.			CAL PSI	CAL MAX PSI	OP. MAX	MAX TBG PSI		MAX CSG PSI		DISPL FLUID		WATER SOURCE
TBG.	CSG.	TOTAL	BUMP PLUG	TO REV.	SO. PSI	RATED	OP.	RATED	OP.	TYPE	WGT.	
	94.5		300							H2O	8.4	Rig

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING:

PRESSURE/RATE DETAIL						EXPLANATION:	
TIME	PRESSURE-PSI		RATE	Bbl. FLUID	FLUID	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/>	
HR: MIN.	PIPE	ANNULUS	BPM	PUMPED	TYPE	TEST LINES	2000 PSI
2:00						CIRCULATING WELL-RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/>	
						On Location Safety Meeting Spot Equip Laying Line to Rig wait for Rig to Run Casings Casings Landed Hook Rig to Circulate Hook Pump to Casings Test Lines	
10:21	2000					Hook Pump to Casings Test Lines	
10:23	200		6		H2O	Start Water Ahead	
10:25	200		6	10	H2O	Start Cement	
10:51	200		5	166	C	Start Tail Cement	
10:56				24	C	All Cement Shutdown Drop Plug	
10:58	200		6			Start Displacement	
11:13	300		2.5	84	H2O	Slow Pump	
11:18	800				H2O	Bump Plug - Check Float	
11:19						Float Held	
BUMPED PLUG	PSI TO BUMP PLUG	TEST FLOAT EQUIP.	Bbl. CMT RETURNS REVERSED	TOTAL Bbl. PUMPED	PSI LEFT ON CSG	SPOT TOP CEMENT	SERV. SURV.
Y/N	800	(Y/N)	50				Sheets



JOB SUMMARY 4239-1

TICKET #	231810	TICKET DATE	10-29-97
BDA / STATE	KS	COUNTY	MORTON
PSL DEPARTMENT			
CUSTOMER REP / PHONE	RICK EMMERT		
API / UWI	15-129-215410000		
JOB PURPOSE CODE	035		

REGION	North America	NWA/COUNTRY	Mid Continent
MBU ID / EMP #	L10104 / 48120	EMPLOYEE NAME	TOM ROYER
LOCATION	LIBERAL	COMPANY	APC
TICKET AMOUNT		WELL TYPE	01
WELL LOCATION	Rolla	DEPARTMENT	CEMENT
LEASE / WELL	BATZLARR C-2A	SEC / TWP / RNG	1-33S-41W

HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS
MUMPHRIES H9692			
FROST 09775			
ORIGINAL			

HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES
470044							
5354 76900							
0404-6610							

Form Name _____ Type: _____
 Form Thickness _____ From _____ To _____
 Packer Type _____ Set At _____
 Bottom Hole Temp. _____ Pressure _____
 Misc. Data _____ Total Depth _____

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
Float Collar INSERT	1	HOWCO
Float Shoe		
Guide Shoe REG	1	
Centralizers 7/8	18	
Bottom Plug		
Top Plug SW	1	
Head P.C.	1	
Packer		
Other		

MATERIALS

Treat Fluid	Density	Lb/Gal
Disp. Fluid	Density	Lb/Gal
Prop. Type	Size	Lb.
Prop. Type	Size	Lb.
Acid Type	Gal.	%
Acid Type	Gal.	%
Surfactant	Gal.	In
NE Agent	Gal.	In
Fluid Loss	Gal/Lb	In
Gelling Agent	Gal/Lb	In
Fric. Red.	Gal/Lb	In
Breaker	Gal/Lb	In
Blocking Agent	Gal/Lb	
Perpac Balls	Qty.	
Other		
Other		
Other		
Other		

DATE	CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
	10-29-97	10-29-97	10-30-97	10-30-97
TIME	1500	1900	0314	0406

WELL DATA

	NEW/USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW
Casing	N	155	5 1/2	KB	5247	
Liner						
Liner						
Tbg/D.P.						
Tbg/D.P.						
Open Hole						SHOTS/FT.
Perforations						
Perforations						
Perforations						

HOURS ON LOCATION		OPERATING HOURS		DESCRIPTION OF JOB
DATE	HOURS	DATE	HOURS	
TOTAL		TOTAL		

HYDRAULIC HORSEPOWER
 ORDERED Avail. _____ Used _____
AVERAGE RATES IN BPM
 TREATED Disp. _____ Overall _____
CEMENT LEFT IN PIPE
 FEET 42.33 Reason Shoe Joint

CEMENT DATA

STAGE	SACKS	CEMENT	BULK/SKS	ADDITIVES	YIELD	LBS/GAL
AV.	25	5/8 10/H	B	1.5% Halobrad-322, 10% SALT, 4% Cal Seal, 4% Bk Facile		10
	2100	" "	B	" "	1.32	14.4
	25	" "	B	" "	1.32	14.4

Circulating	Displacement	Pretlush:	Gal (BB) 8/10/8	Type H2O/S.F/H2O
Breakdown	Maximum	Load & Bkdn:	Gal - BBI	Pad: BBI - Gal
Average	Frac Gradient	Treatment	Gal - BBI	Disp: BBI - Gal
Shut In: Instant	5 Min _____ 15 Min _____	Cement Slurr	Gal - BBI 2/10/1	
		Total Volume	Gal - BBI	SEE Job Log

Frac Ring #1 _____ Frac Ring #2 _____ Frac Ring #3 _____ Frac Ring #4 _____

THE INFORMATION STATED HEREIN IS CORRECT

CUSTOMER'S REPRESENTATIVE SIGNATURE _____



JOB LOG 4239-5

TICKET #	230810	TICKET DATE	10-29-99
BDA/STATE	K.S	COUNTY	MORTON
PSL DEPARTMENT			
CUSTOMER REP / PHONE	KICK EMMERT		
API / UWI			
JOB PURPOSE CODE	035		

REGION	North America	NW/COUNTRY	
MBU ID / EMP #	L10104 / 48120	EMPLOYEE NAME	TOM VOWEL
LOCATION	LINER	COMPANY	APC
TICKET AMOUNT		WELL TYPE	01
WELL LOCATION	W-11A	DEPARTMENT	CEMENT
LEASE / WELL #	W-11A 0-20	SEC / TWP / RNG	1-33-41W

HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS
FRONT 0475			

ORIGINAL

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
	1500							Called out - REQUESTED 1900
	1900							ON LOC - CAT ON LOC.
	2320							RUN Csg, AND F.E.
	0155							ON BOTTOM
	0210							Hook to CIRC.
	0240		2 1/2					Plug mouse
	0250		3 1/2					Plug RAT
	0309							Hookup to CEMENT
	0314	0-3	8		✓	2460		Pump H2O
	17	3	10		✓			Pump SUPER Flush
	20	3	8		✓			Pump H2O
	0322	3-	20		✓	2270		Pump / SCRAVENGER
	0328	3-6	61		✓	1900		Pump amt @ 260 SKS
	0339	6-0			✓	1500		SHUT DOWN - DROP SIVA - WASH UP
	0344	0-6			✓	0500		Pump Displacement
	0403	6-3			✓	500		REDUCE RATE
	0406	3-0			✓	570		PLUG DOWN
	0406				✓	1000		RELEASE TRASS - float 'hold'
								Good Returns
								Thank you!
								Tom & Gary

1020 17