

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: NATIONAL COOPERATIVE REFINERY ASSOCIATION

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 STOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover:

Operator: ANADARKO PETROLEUM CORPORATION

Well Name: MCHARGUE "A" NO. 3

Comp. Date 1/1/96 Old Total Depth 6271

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBT

Commingled Docket No. _____

Dual Completion Docket No. _____

Other (SWD or Inj?) Docket No. _____

HORIZONTAL WELLBORE ORDER #194,779-C (C-28,028)

3-11-97 3-31-97 5-17-97

~~Spud~~ Date of **START** Date Reached TD **Completion Date of**
OF WORKOVER **WORKOVER**

API NO. 15- 1752086-01-03

County SEWARD

- C - SW - SE Sec. 2 Twp. 33 Rge. 34 X E

SHL: 660 Feet from X (circle one) Line of Section

SHL: 1980 Feet from X (circle one) Line of Section

BHL IS: 1315 FSL & 1907 FEL.

Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

Lease Name MCHARGUE "A" Well # 3

Field Name SHUCK

Producing Formation ST. LOUIS

Elevation: Ground 2848 KB _____

Total Depth 6731 (KB), 6718 (GL) PBDT 6701 (GL)

Amount of Surface Pipe Set and Cemented at 1598 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 REWORK JH 12-22-97
(Data must be collected from the Reserve Pit)

Chloride content 24000 ppm Fluid volume 700 bbls

Dewatering method used DRY, BACKFILL & RESTORE LOCATION

Location of fluid disposal if hauled offsite: 6-16-97

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 6-11-97

Subscribed and sworn to before me this 11th day of June 19 97.

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 Letter of Confidentiality Attached
C Wireline Log Received
C Geologist Report Received
 BOTTOMHOLE DIRECTIONAL SURVEY
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other
(Specify)

Operator Name ANADARKO PETROLEUM CORPORATION Lease Name MCHARGUE "A" Well # 3

Sec. 2 Twp. 33S Rge. 34 East County SEWARD
 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 Yes No
 (Attach Additional Sheets.)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
 (Submit Copy.)

List All E.Logs Run: NO NEW LOGS RUN.

<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datums		<input type="checkbox"/> Sample	
Name	Top	Datum	
	LOG TOPS FROM OLD VERTICAL WELLBORE.		
CHASE	2535		
COUNCIL GROVE	2888		
TORONTO	4186		
LANSING	4309		
KANSAS CITY	4609		
MARMATON	4984		
CHEROKEE	5138		
MORROW	5548		
CHESTER	5790		
STE. GENEVIEVE	6076		
ST. LOUIS	6132		

* ORIGINAL COMPLETION 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
* SURFACE	12-1/4"	8-5/8"	24.0	1598	POZMIX/ COMMON	600/200	2%CC/ 2%CC.
* PRODUCTION	7-7/8"	5-1/2"	15.5	6270	LITE 50/50 POZMIX	50/275	10% SALT
EXTERNAL LINER	4 3/4"	3-1/2"	9.3	5771-6300	CLASS H	50	.8% HALAD 322, .1% FWCA-8, .1% HR-5.

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
___ Perforate	5590-5600 SQZ.	CLASS H	50	.6% HALAD 322.
___ Protect Casing	5590-5600 RE-SQZ.	CLASS H	50	NONE.
<u>X</u> Plug Back TD	5932-6162 PB	CLASS H	35	3/4% CFR-3.
<u>X</u> Plug Off Zone	5866-6041 RE-PB.	CLASS H	50	3/4% CFR-3, 1%CC.

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	Depth
	CIBP SET @ 5875, SQZ PERFS: 5590-5600			
	SET WHIPSTOCK PLUG AND DRILL WINDOW. (PB & RE-PB). DRILL TO 6718. SET EXTERNAL LINER 5711-6300.			
OPEN HOLE	17' OF JUNK LEFT IN HOLE: 6701-6718. 6300-6701, (MD FORM GL)		ACID: 4000 GAL 15% FeHCL.	6300-6701 (OH)

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2 3/8	5734		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj. 5-17-97 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	80	0	0		

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 6300-6701 (OH)

ORIGINAL

SCIENTIFIC DRILLING INTERNATIONAL

OKLAHOMA

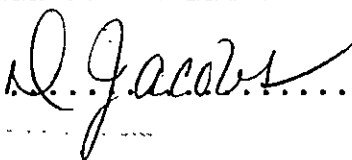
ANADARKO PETROLEUM

15-175-20856-0103

Well Name	: McHARGUE A #3
County	: SEWARD COUNTY
State	: KANSAS
Rig	: CHEYENNE #7
	:
Date Surveyed	: 3-31-97
Job Number	: 34H397105
Performed By	: M MILAM & B MANLEY

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 KANSAS STATE
 1997 APR 16 2 14 PM

This survey is correct to the best of my knowledge and is supported by actual field data.


 COMPANY REPRESENTATIVE

SCIENTIFIC DRILLING INTERNATIONAL ORIGINAL

Customer : ANADARKO PETROLEUM
Well Name : McHARGUE A #3
County : SEWARD COUNTY
State : KANSAS
Rig : CHEYENNE #7

Date 3-31-97
Filename : MCHAR15

Height Of WELLSITE Datum Above Field Datum : 0.00 ft
No Interpolation

15-175-20856-0103

Plane of Vertical Section : 10.00°
Latitude & Departure relate to : WELLSITE CENTRE
Vertical Section Originates at : SLOT CENTRE
Slot Coordinates : Lat 0.000ft
: Dep 0.000ft
Directions Referenced To : TRUE NORTH
Depth at Drill Floor : 13.00 ft

Calculation Method : MINIMUM CURVATURE

Points of Interest
NO DATA

Tool Type	
M.D.	Details
5500.00	FIND
6681.00	ST
6718.00	PRJ

Magnetic Declination : +0.00°
WELLSITE North : +0° 0' 0'' (T)
Grid convergence : +0.0000°

RECEIVED
KANSAS CORP COMM
MAY 13 1995

SCIENTIFIC DRILLING INTERNATIONAL

ORIGINAL

Customer : ANADARKO PETROLEUM
 Well Name : McHARGUE A #3
 County : SEWARD COUNTY
 State : KANSAS
 Rig : CHEYENNE #7

Page 1 of 2
 Date 3-31-97
 Filename : MCHAR1S

Height Of WELLSITE Datum Above Field Datum		No Interpolation						
MD	TVD	VS	TOOL	INC	DIR	N/-S	E/-W	D'LE
ft	ft	ft		deg	deg	ft	ft	°/100
13.00	13.00	0.00	FIND	0.00	0.00	0.00	0.00	0.00
513.00	512.99	1.59	FIND	0.63	64.71	1.17	2.49	0.1
1013.00	1012.92	-3.48	FIND	1.61	171.37	-4.60	6.03	0.3
1513.00	1512.86	-9.37	FIND	0.34	69.06	-11.01	8.46	0.3
2013.00	2012.83	-6.43	FIND	0.75	58.14	-8.75	12.63	0.0
2513.00	2512.82	-4.37	FIND	0.07	256.34	-7.10	15.11	0.1
3013.00	3012.81	-3.09	FIND	0.50	319.84	-5.50	13.41	0.0
3513.00	3512.80	-2.35	FIND	0.51	262.78	-4.12	9.79	0.1
4013.00	4012.79	-1.74	FIND	0.33	342.26	-3.02	7.15	0.1
4513.00	4512.78	-0.47	FIND	0.25	279.80	-1.47	5.63	0.0
5013.00	5012.78	0.79	FIND	0.29	3.31	-0.02	4.63	0.0
5513.00	5512.76	1.81	FIND	0.64	275.15	1.50	1.92	0.1
5903.00	5902.73	-0.65	ST	1.00	238.00	-0.11	-3.13	0.1
5943.00	5942.08	-3.32	ST	17.30	256.10	-1.74	-9.24	40.8
5975.00	5972.20	-3.88	ST	23.30	292.50	-0.45	-19.76	42.7
6007.00	6000.80	2.09	ST	30.40	314.40	7.67	-31.43	37.7
6039.00	6027.46	13.72	ST	36.90	327.00	21.42	-42.48	29.7
6070.00	6050.99	30.08	ST	44.50	341.00	39.56	-51.11	38.7
6101.00	6071.22	51.62	ST	54.10	352.10	62.36	-56.40	41.1
6133.00	6088.48	77.81	ST	60.70	1.10	89.22	-57.91	31.0
6164.00	6102.63	105.25	ST	65.00	8.60	116.67	-55.55	25.6
6196.00	6116.59	134.04	ST	63.30	9.30	145.11	-51.07	5.6
6227.00	6130.64	161.67	ST	62.80	8.40	172.42	-46.82	3.0
6258.00	6144.10	189.57	ST	65.70	7.80	200.06	-42.89	9.5
6288.00	6154.53	217.67	ST	73.60	10.90	227.78	-38.30	28.0
6319.00	6161.23	247.88	ST	81.40	14.10	257.30	-31.75	27.1
6350.00	6165.90	278.46	ST	81.30	13.80	287.05	-24.36	1.0
6384.00	6169.21	312.15	ST	87.50	16.10	319.72	-15.63	19.4
6414.00	6170.55	341.94	ST	87.40	16.50	348.48	-7.22	1.3
6445.00	6172.06	372.70	ST	87.00	16.50	378.17	1.58	1.2
6476.00	6173.09	403.51	ST	89.20	15.50	407.95	10.12	7.7
6507.00	6173.44	434.38	ST	89.50	15.00	437.86	18.27	1.8
6569.00	6174.58	496.18	ST	88.40	13.90	497.89	33.74	2.5
6601.00	6175.33	528.09	ST	88.90	14.20	528.92	41.50	1.8
6632.00	6175.85	559.01	ST	89.20	14.10	558.97	49.08	1.0
6664.00	6176.43	590.92	ST	88.70	14.10	590.01	56.87	1.5
6694.00	6177.09	620.84	ST	88.80	14.00	619.10	64.16	0.4
6731.00	6177.96	657.74	PRJ	88.48	13.90	655.00	73.07	0.9

SCIENTIFIC DRILLING INTERNATIONAL

ORIGINAL

Customer : ANADARKO PETROLEUM
Well Name : MCHARGUE A #3
County : SEWARD COUNTY
State : KANSAS
Rig : CHEYENNE #7

Page 2 of 2
Date 3-31-97
Filename : MCHAR1S

Height Of WELLSITE Datum Above Field Datum 0.00 ft

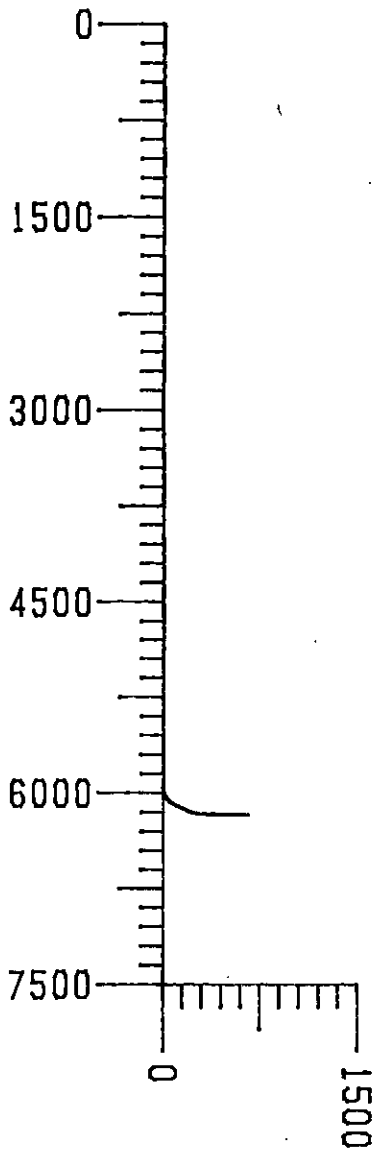
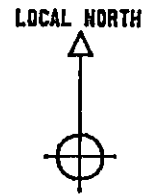
No Interpolation

Origin of Bottom Hole Closure WELLSITE CENTRE
Bottom Hole Closure 659 ft 6.37°

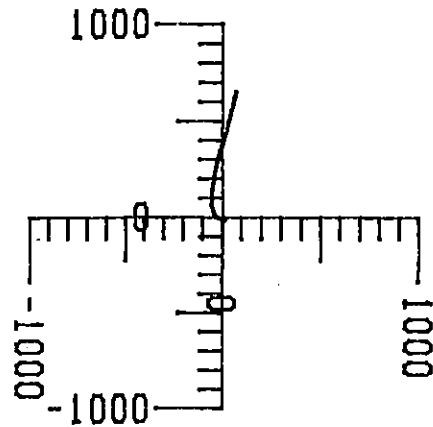
RECEIVED
KANSAS CORP
MCHARGUE A #3
3/31/97



SCIENTIFIC DRILLING INTERNATIONAL
FOR
ANADARKO PETROLEUM
McHARGUE A #3
IN
SECTION 2 - 32S - 24W
SEWARD COUNTY
KANSAS



Plane View Scale 1 Inch = 1000 ft



Bottom Hole Location from Surface:
6177.76' TVD 655.0' North 73.07' East
Bottom Hole Closure:
6731.0' MD 659 ft e 6.37 Az

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KANSAS CORP COMM
1991 JUN 16 10 21 AM

Elevation View Scale 1 Inch = 1500 ft

PLANE OF VERT SECTn 10.00°

WELL DATA

FIELD _____ SEC. _____ TWP. _____ RNG. _____ COUNTY Seward STATE K

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____

PACKER TYPE _____ SET AT _____

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING			5 7/8	GL	-	
LINER						
TUBING			2 7/8	KB	5341	
OPEN HOLE						SHOTS/FT.
PERFORATIONS				560		
PERFORATIONS				ORIGINAL		
PERFORATIONS						

JOB DATA

CALLLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>2-26</u>	DATE <u>2-26</u>	DATE <u>2-26</u>	DATE <u>2-26</u>
TIME <u>0830</u>	TIME <u>0830</u>	TIME <u>0900</u>	TIME <u>1145</u>

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER		

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>D. Jones</u>	430041	Lead
<u>T. Hill</u>	53434	
<u>L. Peterson</u>	4115 / 73127	Houston

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB/GAL. °API

DISPL. FLUID _____ DENSITY _____ LB/GAL. °API

PROP. TYPE _____ SIZE _____ LB.

ACID TYPE _____ GAL. _____ %

SURFACTANT TYPE _____ GAL. _____ IN

NE AGENT TYPE _____ GAL. _____ IN

FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN

GELLING AGENT TYPE _____ GAL.-LB. _____ IN

FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN

BREAKER TYPE _____ GAL.-LB. _____ IN

BLOCKING AGENT TYPE _____ GAL.-LB. _____

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

OTHER _____

DEPARTMENT Control

DESCRIPTION OF JOB Spurge

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.

CUSTOMER REPRESENTATIVE X [Signature]

HALLIBURTON OPERATOR [Signature] COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	50	Pow			None	1.06	16.5

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____ PRESLUSH: BBL.-GAL. _____ TYPE _____

BREAKDOWN _____ MAXIMUM _____ LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____

AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. 16.5

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____ CEMENT SLURRY: BBL.-GAL. 9.4

HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL.-GAL. _____

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET 79 REASON Run to P...

REMARKS

CUSTOMER

CUSTOMER: Lead
LEASE: Lead
WELL NO: 1855144
JOB TYPE: Spurge
DATE: 2-26-17

JOB LOG HAL-2013-C

 CUSTOMER **Andrews Petro.** WELL NO. **A 3** LEASE **McKinnogue** JOB TYPE **Squeeze** TICKET NO. **18551414**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0530							Time Collected
	0900							Time Ready
	0820							Time out
	0900							Hookup To Tub. & Casing
	0915	2						Load BS
	0926	1	20			50		Press up Casing
	0928							Valve Leaks
	0937		6			1500		Load Tub Press up
	0945					2000		Can Not Pump into PERFS
	0948							Break hose!
								Run Tub in Hole To Run Pass The PERFS
								with Packer To Make a Sweep
	1005							Set Packer 5514 FT Hookup Tub.
	1008					500		Press up BS
	1009	1	2			840		Load Tub Press up & Breaken Back
	1012	2	6			575/320		Increase rate 8 BS/Total Pump.
	1016							Start Cement Down Hole
	1020		9.4					Shut Down Wash Pumps & Lines
	1024	2	12					Start Down 12 BS/16 Slow Rate Down 1 BS/PM
	1030		3 1/2			850/1800		Press Increase Stage Cement in 15 1/2 BS/
	1050	1/4	1/2			1500/1450		
	1055					1150		Release Press & Hold
	1058					1500		Press up Hold
	1103	2				1100/		Release Press To Release out
	1118		30			1900		Press Down
	1120							Shut Down Clean
								R. Pull 14 Joints
	1130							Hookup To Tub &
	1133					500		Press up BS
	1135					1000		Press up Tub Shut in Cas & Tub Valve
	1139							Break hose Tub & Casing
	1145							Finish 1/4 Job.

ORIGINAL

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KANSAS CORP COMM
FRT JUN 16 P 2:45

Thanks For Calling Eric
Halliburton

Dennis

1500 BS Squeeze
500 PLE 1100 BS
5 BS/2 Release out to PT 2.6 BS/1450
1.8 BS/ Casing 79 FT/ 14 SE

JOB LOG HAL-2013-C

CUSTOMER		WELL NO.		LEASE		JOB TYPE		DATE	
ARC		A-3		MC HARGUE		075		2-24-97	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS	
				T	C	TUBING	CASING		
	0710 0645								Called out - Requested "0750 On Loc.
									Safety Meeting - Rig up Hook up to test CIBP
	0830	0-2 1/2		✓		0/50	↑		Pump H ₂ O
	0846		22 22	✓		50/500	↑		Load tbg.
	0851			✓		500/0	↓		Release PRESS. - Good test - T.O.H.
	0900				✓			0/100	Load B.S.
	0950		100		✓		↑	100/500	Load up Re test B.S. (lost 100 psi in 4 min)
	1009	0-2		✓		0/40			Pump H ₂ O - Injection rate
	1013	2-4	28	✓		40/100			28 bbls out (4 BBL min at 100 psi) Shut down - wait on water.
	1149	0-2	8	✓			↑	0/40	Pump H ₂ O - tbg PRESS.
	1153	2-1	9	✓				40	Pump cont. - tbg.
	1205	1-0					↓	40/v	Shut down - tbg.
	1211	0-1 1/2		✓			↑	0/10	Pump Displ. - tbg.
	1225	1 1/2 0	19	✓			↓	10/0	Shut down - vacuum
	1231			✓				-	VACUUM - tbg.
	1248	XX	21	✓				-	VACUUM - tbg.
	1300		21 1/2	✓				-	VACUUM - tbg.
	1320		22	✓				-	VACUUM
	1340		22	✓				-	stop VACUUM
	1403			✓			↑	0/100	Pump up - tbg.
	1408			✓			↑	600/1000	Pump up tbg.
	1414		22 1/2	✓			↑	1000/1500	Pump up - 22 1/2 total bbls.
	1419						↓	1500/0	Release PRESS.
	1422				✓	0/400	↑	0/100	Reverse out
	14		28		✓		↓	500/0	Shut down - Pull to stands
				✓		0/1000			PRESS up tbg.
				✓		1000			Shut in Release from Loc.
									THANK YOU! Tom & Sonny & crew

ORIGINAL

 RECEIVED
 KANSAS CORP COMM
 1997 JUN 15 P 2 48

WELL DATA

FIELD _____ SEC _____ TWP _____ RNG _____ COUNTY *SEWARD* STATE *KS.*

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____

PACKER TYPE _____ SET AT _____

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	<i>u</i>	<i>15.5</i>	<i>5 1/2</i>	<i>62.</i>	<i>5875</i>	
LINER						
TUBING	<i>u</i>	<i>10.4</i>	<i>2 7/8</i>	<i>KB</i>	<i>6162</i>	
OPEN HOLE			<i>4 3/4</i>	<i>5875</i>	<i>6162</i>	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLS OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <i>3-16-97</i>	DATE <i>3-16-97</i>	DATE <i>3-16-97</i>	DATE <i>3-16-97</i>
TIME <i>0930</i>	TIME <i>1145</i>	TIME <i>1445</i>	TIME <i>1315</i>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<i>T. BROADFOOT</i>	<i>38242</i>	<i>LIBERAL KS.</i>
<i>C. LAY</i>	<i>53552</i>	<i>II</i>
<i>C. ASHLEY</i>	<i>52276</i>	<i>HUGSTON KS.</i>
<i>M. HESTON</i>	<i>5742</i>	<i>LIBERAL KS.</i>
	<i>BD</i>	

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER		

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB/GAL. °API

DISPL. FLUID _____ DENSITY _____ LB/GAL. °API

PROP. TYPE _____ SIZE _____ LB.

PROP. TYPE _____ SIZE _____ LB.

ACID TYPE _____ GAL. _____ %

ACID TYPE _____ GAL. _____ %

ACID TYPE _____ GAL. _____ %

SURFACTANT TYPE _____ GAL. _____ IN

NE AGENT TYPE _____ GAL. _____ IN

FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN

GELLING AGENT TYPE _____ GAL.-LB. _____ IN

FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN

BREAKER TYPE _____ GAL.-LB. _____ IN

BLOCKING AGENT TYPE _____ GAL.-LB. _____

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

OTHER _____

DEPARTMENT *CEMENT*

DESCRIPTION OF JOB *CEMENT WHIPSTOCK FOR KICK OFF*

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.

CUSTOMER REPRESENTATIVE *X*

HALLIBURTON OPERATOR *J. Broadfoot* COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU FT./SK.	MIXED LBS./GAL.
<i>1</i>	<i>35</i>	<i>Pacem</i>		<i>B</i>	<i>CFR-3 .75%</i>	<i>.96</i>	<i>11.2</i>

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____ PRES LUSH: BBL -GAL. *25* TYPE _____

BREAKDOWN _____ MAXIMUM _____ LOAD & BKDN: BBL -GAL. _____ PAD: BBL -GAL. _____

AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL -GAL. _____ DISPL: BBL -GAL. _____

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____ CEMENT SLURRY: BBL -GAL. *6*

HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL -GAL. _____

ORDERED _____ AVAILABLE _____ USED _____ REMARKS *M S A S ON*

AVERAGE RATES IN BPM _____

TREATING _____ DISPL _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET *274* REASON *WHIPSTOCK*

CUSTOMER

CUSTOMER: *HANNAH'S PETROLEUM*
LEASE: *NO HARGREAVE*
WELL NO.: *A-3*
JOB TYPE: *Whipstock*
DATE: _____

ORIGINAL

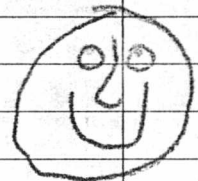
RECEIVED
KANSAS CORP
DOWN
9/2/96

JOB LOG HAL-2013-C

CUSTOMER: **ADAMARKS PET. CORP.** WELL NO.: **A-2** LEASE: **McHARGUE** JOB TYPE: **WHIPSTOCK** TICKET NO.: **185442**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0930							CALLED OUT - READY 1300
	1145							ON LOC. - RUNNING D.P.
	1440							SAFETY MEETING
	1445							Hook up to D.P. - CMT LINE
	1447					0	660	START H ₂ O SPACER AHEAD
	1455					630	0	SHUT OFF MIXING CMT
	1458					250		START CMT 17 ^{1/2} GAL
	1503					0	0	SHUT OFF - AIR IN PUMP
	1506					0	380	START DISPLACEMENT H ₂ O
	1513					380	0	SHUT OFF UNHOOK PULL 5 STANDS OUT CIRCULATE HOLES WITH RIG.

ORIGINAL



THANKS FOR CALLING
 HALLIBURTON ENERGY SERVICES
 LIBERAL OKS.
 HAVE A GOOD DAY

BROADFOOT - LAM - ASHLEY
 - MYRON WESTON -

RECEIVED
 KANSAS CORP COMM
 1997 JUN 16 P 2:46

WELL DATA

FIELD _____ SEC. _____ TWP. _____ RNG. _____ COUNTY SEWARD STATE KS

FORMATION NAME _____ TYPE _____
 FORMATION THICKNESS _____ FROM _____ TO _____
 INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD
 PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD
 COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____
 PACKER TYPE _____ SET AT _____
 BOTTOM HOLE TEMP. _____ PRESSURE _____
 MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING			5 1/2	KB	5853	
LINER						
TUBING DP		10.50	2 3/4	KB	6054	
OPEN HOLE			4 3/4	5853	6054	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

ORIGINAL

JOB DATA

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 3-17-97	DATE 3-17-97	DATE 3-18-97	DATE 3-18-97
TIME 2300	TIME 2230	TIME 0106	TIME 0134

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER		

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
T.M. Broadfoot	420045	Liberal KS
Jason Nicholas	52447	Liberal KS
Sam Grant	50404	Liberal KS

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB./GAL. °API
 DISPL. FLUID _____ DENSITY _____ LB./GAL. °API
 PROP. TYPE _____ SIZE _____ LB.
 ACID TYPE _____ GAL. _____ %
 SURFACTANT TYPE _____ GAL. _____ IN
 NE AGENT TYPE _____ GAL. _____ IN
 FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN
 GELLING AGENT TYPE _____ GAL.-LB. _____ IN
 FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN
 BREAKER TYPE _____ GAL.-LB. _____ IN
 BLOCKING AGENT TYPE _____ GAL.-LB. _____
 PERFPAC BALLS TYPE _____ QTY. _____
 OTHER _____
 OTHER _____

DEPARTMENT _____
 DESCRIPTION OF JOB _____
 JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.
 CUSTOMER REPRESENTATIVE X M.C.E. D.
 HALLIBURTON OPERATOR Jason S. Nicholas COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
PLUG	5	CEMENT			1% CL	57	17.2

PRESSURES IN PSI

CIRCULATING _____ DISPLACEMENT _____
 BREAKDOWN _____ MAXIMUM _____
 AVERAGE _____ FRACTURE GRADIENT _____
 SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____
 HYDRAULIC HORSEPOWER _____
 ORDERED _____ AVAILABLE _____ USED _____
 AVERAGE RATES IN BPM _____
 TREATING _____ DISPL. _____ OVERALL _____
 CEMENT LEFT IN PIPE _____
 FEET _____ REASON _____

SUMMARY

VOLUMES

PRESLUSH: BBL.-GAL. _____ TYPE _____
 LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____
 TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. _____
 CEMENT SLURRY: BBL.-GAL. 8.6
 TOTAL VOLUME: BBL.-GAL. _____

REMARKS

PLUG SET AT TOC 5677 FT. 2 1/4"
 RECEIVED ADMASAS CORP CONN 3/19/97 2:46

CUSTOMER

CUSTOMER: ADMASAS CORP CONN
 LEASE: McHargue
 WELL NO: 1-3
 JOB TYPE: Cement Plug

TICKET #	183743	TICKET DATE	
REGION	North America	NWA/COUNTRY	Midcast/Ineat
MBU ID / EMP #	L10101 R-7653	EMPLOYEE NAME	Roa Crist
LOCATION	Liberal	COMPANY	Amadorko Petroleum
TICKET AMOUNT	6135.47	WELL TYPE	25
WELL LOCATION	Seward Co Ks	DEPARTMENT	5001
LEASE / WELL #	Mclurgue #A-3	SEC / TWP / RNG	2 33S 34W
BDA / STATE	Ks	PSL DEPARTMENT	Cement
COUNTY	Seward	CUSTOMER REP / PHONE	Chris Doyle
API / UWI #		JOB PURPOSE CODE	055

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
M. Heston 76568							
R. Crist 07653							
E. G. ... 44631							
L. Patterson 48710							

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
420045	30						
52947-75496	30						
4115-76237	30						

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

DATE	TIME	CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
3-30-97	1300	3-30-97	1800	3-30-97	2323
					0342
					3-31-97

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
Float Collar		C
Float Shoe		
Guide Shoe		M
Centralizers		2
Bottom Plug		
Top Plug		
Head		
Packer <i>Formation</i>		
Other		

WELL DATA

NEW/USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW
Casing	4 1/2 4 1/2	3 1/2	5571	6300	
Liner		3 1/2	5871	6300	
Liner					
Tbg/D.P.					
Tbg/D.P.					
Open Hole					SHOTS/FT.
Perforations					
Perforations					
Perforations					

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	
Perfpac Balls	Qty.	
Other		
Other		
Other		
Other		

HOURS ON LOCATION		OPERATING HOURS		DESCRIPTION OF JOB
DATE	HOURS	DATE	HOURS	
3-30	6	3-30	2	Cement Liner
3-31	4	3-30	3 1/2	
TOTAL		TOTAL		

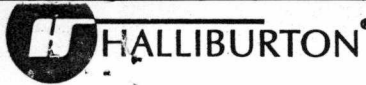
ORDERED	HYDRAULIC HORSEPOWER	Used
	Avail.	
TREATED	AVERAGE RATES IN BPM	Overall
	Disp.	
FEET	CEMENT LEFT IN PIPE	
	Reason	

CEMENT DATA

STAGE	SACKS	CEMENT	BULK/SKS	ADDITIVES	YIELD	LBS/GAL
	50	H	B	8% Halad 722, 1% HR 5, 1% FWCA	1.06	16.9

Circulating	Displacement	Preflush:	Gal - BBI	Type
Breakdown	Maximum	Load & Bkdn:	Gal - BBI	Pad: BBI - Gal
Average	Frac Gradient	Treatment	Gal - BBI	Disp: BBI - Gal <i>30.15</i>
Shut In: Instant	5 Min	Cement Slurr	Gal - BBI	
	15 Min	Total Volume	Gal - BBI	<i>9.4</i>

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 #	183773	TICKET DATE	
BDA / STATE	KS	COUNTY	
PSL DEPARTMENT			
CUSTOMER REP / PHONE			
API / UWI #			
JOB PURPOSE CODE			

REGION	North America	NWA/COUNTRY	
MBU ID / EMP #		EMPLOYEE NAME	
LOCATION		COMPANY	
TICKET AMOUNT		WELL TYPE	
WELL LOCATION		DEPARTMENT	
LEASE / WELL #		SEC / TWP / RNG	

ORIGINAL

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

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
	1300							Called Out
	1730							on Loc Running Pipe
	1800							Preview Job
	2323							Hook up iron
	2340							Safety Meeting
	2350							0-282 Pump Kcl
	0024	2	68					0 Shut Down
	0030	4	16					282 Pump Kcl
	0034							Shut Down
	0040	3						700 Pump KCL
	0044		12					shut down
	0045							700-2200 pressure up
	0047							Hook To Circulate
	0103							circ to Pit
	0141							0-600 Pump KCl spacer
	0148	3.5	20			600		Start MFI spacer
	0153	3.5	20			600		Pump KCl spacer
	0159	3	6			600-470		Pump Cement 15.4
	0158					0		Shut Down wash Pump & Lines
	0202	3.4	30			1030		Pump Disp
	0212					1030-2800		Shut Down Bump Plug Knock Loose
								While Rig Crew pulls 5 stands
	0300							Hook up To circulate Hole
	0306	3.7	130			0-1300		Pump H2O
								Shut Down Job Over

Thanks
 Ron Crist
 2 Crew

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