

SIDE ONE

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

API NO. 15- 075-20,456-0000 FROM CONFIDENTIAL

County Hamilton C NE/4 Sec. 8 Twp. 22S Rge. 40 East West 3960 Ft. North from Southeast Corner of Section 1320 Ft. West from Southeast Corner of Section (NOTE: Locate well in section plat below.)

Operator: License # 04680

Name: American Exploration Co.

Address 700 Louisiana, Suite 2100 Houston, Texas 77002

City/State/Zip

Purchaser: KN Energy

Operator Contact Person: Marty B. McClanahan

Phone (713) 220-8251

Contractor: Name: Cheyenne Drilling Co.

License: 05382

Wellsite Geologist: Ron Osterbuhr

Designate Type of Completion

- X New Well Re-Entry Workover Oil SWD Temp. Abd. X Gas SI Inj Delayed Comp. Dry Other (Core, Water Supply, etc.)

If OWMO: old well info as follows:

Operator:

Well Name:

Comp. Date Old Total Depth

Drilling Method:

Mud Rotary X Air Rotary Cable

4/30/90 5/03/90 6/17/90

Spud Date Date Reached TD Completion Date

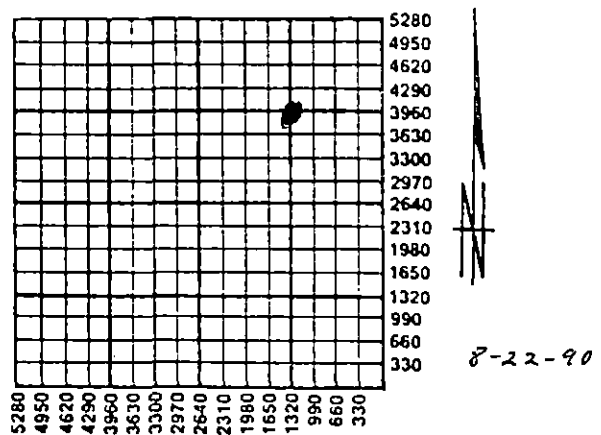
Lease Name HCU Well # 820-B

Field Name Bradshaw

Producing Formation Winfield

Elevation: Ground 3569 KB

Total Depth 2880 PBD 2831



Amount of Surface Pipe Set and Cemented at 364 Feet

Multiple Stage Cementing Collar Used? Yes X No

If yes, show depth set Feet

If Alternate II completion, cement circulated from 2880

feet depth to Surface w/ 1250 900 sx cmt.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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 drillers time log 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. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

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 Marty B. McClanahan Title Sr. Drilling Production Analyst Date 9/12/90

Subscribed and sworn to before me this 12th day of September 1990 Notary Public [Signature] Date Commission Expires AUG. 25, 1994

K.C.C. OFFICE USE ONLY F Letter of Confidentiality Attached C Wireline Log Received C Drillers Timelog Received Distribution KCC SWD/Rep NGPA KGS Plug Other (Specify)

RECEIVED STATE CORPORATION COMMISSION 10-3-90 OCT 3 1990 CONSERVATION DIVISION Wichita, Kansas

SIDE TWO

Operator Name American Exploration Co. Lease Name HCU Well # 820-B
 Sec. 8 Twp. 22 Sge. 40 County Hamilton
 East 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Formation Description <input type="checkbox"/> Log <input type="checkbox"/> Sample Name Top Bottom Stone Corral Anhy. --- 2298 (+1272) Winfield 2730 (+840) Ft. Riley 2844 (+726)
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

RELEASED
 SEP 07 1991
 FROM CONFIDENTIAL

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12-1/4	8-5/8	20#	364	Class "C"	350	2% CC w/1/4# D-29
Production	7-7/8	4-1/2	9.6#	2679	DSLW Class "H"	600 300	6% Cel 1/4# D-29
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used) Depth			
4 SPF	2738-52 & 2732-34			1,000 gal. 15% HCL + Additives			
TUBING RECORD							
Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
2-3/8	2596	2596					
Date of First Production	Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)						
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	Bbls.	Gas-Oil Ratio Gravity

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

METHOD OF COMPLETION: Open Hole Perforation Dually Completed Commingled Other (Specify) _____

Production Interval _____

ORIGINAL
CASING & CEMENTING REPORT

15-075-20456-0000

CONFIDENTIAL

Well Name 0820-B H.C.U. Location _____
Casing Production Date 5-3-90

Jts. On	m On	Size	Wt.				Jts	Depth	m Run
Locat.	Locat.	mm	kg/m	Cr.	Rge.	THD	T&C	Make	In Well
70	202130	4 1/2	9.5		3	8 1/2	STAC		2882.13

Shoe Make Weatherford Type REGULAR Length .8 m
Collar Make Weatherford Type AUTO FILL Length .8 m

Landing Jt. (When Used) Length _____ m
Overall Length of Casing String 2882.13 m
m Up From K.B. (subtract) 3.13 m

Setting Depth By Driller 2879 m. By Tally 2879 m

CENTRALIZERS

SCRATCHERS

Make & No. Weatherford (10) Position 2836-2885 (4) 2025-1590 (6)
Remarks (Thread Lock, Weld, Mill) Thd. Lock Shoe, COLLAR NEXT 3
COLLARS 2 BASKETS Riding JTS # 18+19 286743110'

Hole Size 7 7/8 mm Casing In Hole Size 4 1/2 mm
Depth 2880 m Setting Depth 2879 m
Mud Type STARCH Wt. 9.6 kg/m Visc. 40 SLWL 9.6 cm
BOP's ANNULAR
Power Tong Co FRANCIS Torque Max. 1020 Min. 1000
Casing String Wt. 26000 daN Remarks _____

Cementing Co. DOWEL-Schlumberger Operator BRETT GREENWICH

TYPES & QUANTITIES OF CEMENT

Date 5-3-90

Filler Volume Amount 600 m³ Type 35/65 Wt. 12-2 kg/m³
Additives 6% GEL 1/4" SK. D-29
Tail In Volume Amount 300 m³ Type GLA. H Wt. 1516 kg/m³
Additives 3% D-60 1/4" SK. D-29
HT. Cemented _____ Water Ahead 25 m³ Start Mix _____ m³
Finish Mix _____ m³ Pumping Press 200 kPa Bump Press 1500 kPa
Float Held YES Cement Returns FULL 10 BBLs m³
Plug Down LI'S PM Date 5-3-90
Wt. Landed in Slips 26000 daN Make of Bowl _____
Size _____ mm Series _____ Slip & Seal Esembly _____
Remarks (Wellhead - Make, Type, Size)

Co. Rep. John E. Harris

FROM CONFIDENTIAL
SEP 0 7 1991
RELEASED

CONFIDENTIAL

ORIGINAL

FIELD SERVICES
 INDUSTRIAL SERVICES

DSI SERVICE ORDER
 RECEIPT AND INVOICE NO.
 03-12-2562

DSI SERVICE LOCATION NAME AND NUMBER
 145563 Ks 03-12

CUSTOMER NUMBER

CUSTOMER P.O. NUMBER

TYPE SERVICE CODE
 285

BUSINESS CODES

CUSTOMER'S
 NAME

AMERICAN EXPLORATION

ADDRESS

CITY, STATE AND
 ZIP CODE

RELEASED
 SEP 07 1991

WORKOVER
 NEW WELL
 OTHER

W
 N

API OR IC NUMBER

IMPORTANT
 SEE OTHER SIDE FOR TERMS & CONDITIONS

ARRIVE LOCATION	MO.	DAY	YR.	TIME
56	3	90		1000

FROM CONFIDENTIAL

DSI will furnish and Customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS or DSI INDUSTRIAL SERVICE CONTRACT NO. _____ in accordance with the terms and conditions as printed on the reverse side of this form.

AL SERVICE ORDER RECEIPT

I certify that the materials and services listed were authorized and received and all services performed in a workmanlike manner and that I have the authority to accept and execute this document.

CMF 2880' 4 1/2 L.S. w/ 600 SKS HOV# C 35/60"
 702/6 + 6% D20 + 1/4" / SK D29
 300 SKS H+, 3% D60 + 1/4" / SK D29

JOB COMPLETION	MO.	DAY	YR.	TIME
5	3	90		1423

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE

X. John S. ...

STATE	CODE	COUNTY / PARISH	CODE	CITY
Kansas		Hamilton		

WELL NAME AND NUMBER / JOB SITE

HCU # 820-B

LOCATION AND POOL / PLANT ADDRESS

Sec 8-225-40W

SHIPPED VIA

03

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
059000-002	MI LEAGE chg	Mi	64	2.40	153.60
048215-000	Pump chg	EA	1	1026.00	1026.00
049102-000	DELIVERY chg	TN/Mi	2683	.80	2146.40
049100-000	SERVICE chg	FT3	952	1.08	1028.16
059697-000	FARE - 1.77	EA	1	110.00	110.00
040003-000	Class C	SK	390	7.00	2730.00
045008-000	LITE FOZ 3	FT3	210	2.30	483.00
045014-050	D20 BENTONITE	LB	3132	.13	407.16
044003-025	D29 CELLULOSE FLAKE	LB	225	1.37	308.25
044002-050	D60 FLOID LOSS	LB	85	6.70	569.50
048100-000	Casing SWIVEL	EA	1	205.00	205.00
050002-044	Guide shoe	EA	1	135.00	135.00
052004-044	OFFICE FILL COLLAR	EA	1	385.00	385.00
056011-044	CENTRALIZERS	EA	10	48.00	480.00
056204-044	TOP RUBBER PLUG	EA	1	70.00	70.00
056014-044	STOP RING	EA	1	16.00	16.00
057499-001	THREAD LOCK	EA	2	22.00	44.00
040015-000	Class H	SK	300	6.85	2055.00

Thanks For Using DSI

SUB TOTAL

FIELD ESTIMATE # 12,352.00

LICENSE/REIMBURSEMENT FEE	
LICENSE/REIMBURSEMENT FEE	
REMARKS:	TICKET SUBJECT TO DISCOUNT
STATE	% TAX ON \$
COUNTY	% TAX ON \$
CITY	% TAX ON \$
SIGNATURE OF DSI REPRESENTATIVE	TOTAL \$

CEMENTING SERVICE REPORT

CONFIDENTIAL ORIGINAL
DOWELL SCHLUMBERGER INCORPORATED

15-075-20456-0000
TREATMENT NUMBER: 03-72-2562 DATE: 5-3-90
STAGE: DS DISTRICT: 014365 K3

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO. HCU # 820-B	LOCATION (LEGAL) SEC 8-225-40W	RIG NAME: Cheyenne Rig #5
FIELD-POOL	FORMATION	WELL DATA: BIT SIZE 7 7/8 CSG/Liner Size 4 1/2
COUNTY/PARISH HAMILTON	STATE Kansas	API. NO.
NAME AMERICAN EXPLORATION		TOP
AND		DEPTH
ADDRESS RELEASED		WEIGHT 9.5
ZIP CODE		FOOTAGE 2882
SPECIAL INSTRUCTIONS SFD 0 7 1001		MUD TYPE
		GRADE
		LESS FOOTAGE SHOE JOINT(S) 45
		MUD VISC. Disp. Capacity 2839
		TOTAL 45.9

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

Float	TYPE	D. Fill Collar	TYPE	
	DEPTH	2839	DEPTH	
Shoe	TYPE	CMT Guide	TYPE	
	DEPTH	2882	DEPTH	

Head & Plugs TBG D.P. SQUEEZE JOB

Double WEIGHT TOOL TYPE

Single GRADE TAIL PIPE: SIZE DEPTH

Swage THREAD TUBING VOLUME Bbls

Knockoff NEW USED CASING VOL. BELOW TOOL Bbls

TOP R W DEPTH TOTAL Bbls

BOT R W ANNUAL VOLUME Bbls

TIME	PRESSURE		VOLUME PUMPED GBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	TIME/1000	DATE	TIME/1000	DATE	TIME/1000	DATE	
0001 to 2400											
1500	4800										
1502	1800										
1504		140	20		5	F/160	8.35				
1508		350	5	20	5	CMT					
1509		350	211	25	5	CMT	12.4				
1550		230	63	236	4	CMT	15.8				
1605		180		299	-						
1605		-		299	-						
1607		-		299	-						
1607		120	46	299	4	F/160					
1615		720		34	2						
1618		780		41	1						
1622		860		46	1						
1623		1490									

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1.	600	1.99	35/65 (Aozk) + 6% D20 + 1/4" SK D29				211	12.4
2.	300	1.18	2133 H+ 3% D60 + 1/4" SK D29				63	15.8
3.								
4.								
5.								
6.								

BREAKDOWN FLUID TYPE	VOLUME	DENSITY	PRESSURE	MAX. 1490	MIN:
<input type="checkbox"/> HESITATION SO.	<input type="checkbox"/> RUNNING SO.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Cement Circulated To Surf.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	5 Bbls
BREAKDOWN	PSI	FINAL	PSI	DISPLACEMENT VOL.	46 Bbls
Washed Thru Perfs	<input type="checkbox"/> YES <input type="checkbox"/> NO	TO	FT.	MEASURED DISPLACEMENT ()	<input type="checkbox"/> WIRELINE
PERFORATIONS	TO	TO	CUSTOMER REPRESENTATIVE	DS SUPERVISOR	
			John	COBY CREAVIK	

15-075-20456-0000

ORIGINAL CONFIDENTIAL

CASING & CEMENTING REPORT

Well Name 08-20-13
 Casing 4 5/8 Sulfur

Location NE 1/4 Sec 8 225-240 W
 Date 4-30-96

Jts. On Locat.	m On Locat.	Size mm	Wt. kg/m	Cr.	Rge.	THD	T&C	Make	Jts. Run	Depth Landed m	m Run In Well
17		4 5/8	204		4	16			8	352.26	352.26

Shoe Make D.S. Type Texas Length 1 m
 Collar Make _____ Type _____ Length _____ m

RELEASED

SEP 07 1991

Landing Jt. (When Used) Length 15.00 m
 Overall Length of Casing String 364.26 m
 Up From K.B. (subtract) 4.00 m
 Setting Depth By Driller _____ m By Tally 364.26 m

FROM CONFIDENTIAL

CENTRALIZERS

SCRATCHERS

Make & No. D.S. 3 Position 3
 Remarks (Thread Lock, Weld, Mill) Bottom 3 joints

Hole Size 12 1/4 mm Casing In Hole Size _____ mm
 Depth 364 m Setting Depth _____ m
 Mud Type Fresh Guel Wt. _____ kg/m Visc. _____ S/LWL _____ cm
 BOP's _____
 Power Tong Co _____ Torque Max. _____ Min. _____
 Casing String Wt. 2200 daN Remarks _____

Cementing Co. Dowell Sch. Operator GR-6

TYPES & QUANTITIES OF CEMENT

Date 4-30-96

Filler Volume Amount 350 SX m³ Type LS-51 Wt. 15.51 kg/m³
 Additives 290 cc D-29
 Tail In Volume Amount _____ m³ Type _____ Wt. _____ kg/m³
 Additives _____
 HT. Cemented _____ Water Ahead 10 BBL. m³ Start Mix 2:50 m³
 Finish Mix 8 1/2 m³ Pumping Press 12.6 kPa Bump Press 200 kPa
 Float Held 4.25 Cement Returns Yes m³
 Plug Down 8:25 P.M. 4-30-96 Date 4-30-96
 Wt. Landed in Slips _____ daN Make of Bowl _____
 Size _____ mm Series _____ Slip & Seal Esembly _____
 Remarks (Wellhead - Make, Type, Size)

Co. Rep. H. H. H.

DOWELL SCHLUMBERGER INCORPORATED
 P.O. BOX 4378 HOUSTON, TEXAS 77210

CUSTOMER
 15-075-20456-0000

CONFIDENTIAL

ORIGINAL

OILFIELD SERVICES
 INDUSTRIAL SERVICES

DSI SERVICE ORDER
 RECEIPT AND INVOICE NO.
 03-12-2553

DSI SERVICE LOCATION NAME AND NUMBER
 014563 K3 03-12

CUSTOMER NUMBER CUSTOMER P.O. NUMBER TYPE SERVICE CODE BUSINESS CODES
 271

CUSTOMER'S NAME: American Exploration
 ADDRESS: _____
 CITY, STATE AND ZIP CODE: _____

RELEASED
 SEP 07 1991

WORKOVER NEW WELL OTHER API OR IC NUMBER

ARRIVE LOCATION MO. DAY YR. TIME
 4 30 90 1730

SERVICE ORDER RECEIPT
 I certify that the materials and services listed were authorized and received and all services performed in a workmanlike manner and that I have the authority to accept and execute this document.

DSI will furnish and Customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS or DSI INDUSTRIAL SERVICE CONTRACT NO. _____ in accordance with the terms and conditions as printed on the reverse side of this form.

CON 367' B 5/8 SURF W/ 350 SKS H + 2" R C A I C +
Y A + 1/2 K 029

JOB COMPLETION MO. DAY YR. TIME
 4 30 90 2030

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE
[Signature]

STATE: Kansas CODE: _____ COUNTY/PARISH: Hamilton CODE: _____ CITY: _____

WELL NAME AND NUMBER / JOB SITE: HCU # 820-B LOCATION AND POOL / PLANT ADDRESS: SEC B-223-40W SHIPPED VIA: DS

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
059200-002	Mileage Chg	Mi	64	2.40	153.60
048209-000	Pump Chg 0-300'	EA	1	433.00	433.00
048209-001	ADDITIONAL FOOTAGE 300-367'	FT	67	.41	27.47
049102-000	DELIVERY Chg 33,646' x 64m	TOLM	1077	.80	861.60
049100-000	SERVICE Chg	FT	363	1.08	392.04
057697-000	PACK	EA	1	110.00	110.00
040015-000	CLASS H	SK	350	6.85	2397.50
067005-100	FOIL	LB	658	-.32	210.56
040006-050	B29 Cellophane FLAKE	LB	88	1.37	120.56
050001-085	TEXAS TATTEN SHOES	EA	1	200.00	200.00
056011-085	CENTRALIZERS	EA	2	68.00	136.00
056015-085	BAFFLE PLATE	EA	1	70.00	70.00
048501-085	TOP WOOD Plug	EA	1	86.00	86.00
057499-001	Thread LOCK	EA	1	22.00	22.00

RECEIPT

Thanks for using DS.

Field Estimate # 5220³³ SUB TOTAL

LICENSE/REIMBURSEMENT FEE

REMARKS: TICKET SUBJECT TO DISCOUNT

STATE: _____ COUNTY: _____ CITY: _____

% TAX ON \$

SIGNATURE OF DSI REPRESENTATIVE: [Signature] TOTAL \$

CEMENTING SERVICE REPORT

ORIGINAL

15-075.20456-0000

DS-495 PRINTED IN U.S.A.

DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER: 93-12-2553
 DATE: 4-30-90
 STAGE: DS DISTRICT: 01455E3 K3

WELL NAME AND NO. **UCV # 820-B** LOCATION (LEGAL) **SEC 8-22S-40W**

FIELD-POOL _____ FORMATION _____

COUNTY/PARISH **Hamilton** STATE **Ks** API. NO. _____

NAME **AMERICAN EXPLORATION**

AND **CONFIDENTIAL**

ADDRESS _____

ZIP CODE _____

SPECIAL INSTRUCTIONS **RELEASED**

RIG NAME: **Cheyenne #5**

WELL DATA:		BOTTOM		TOP	
BIT SIZE 12 1/4	CSG/Liner Size 8 5/8				
TOTAL DEPTH	WEIGHT	24 #			
<input type="checkbox"/> ROT <input type="checkbox"/> CABLE	FOOTAGE	347.26			
MUD TYPE	GRADE				
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD				
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S)	12.94			TOTAL
MUD VISC.	Disp. Capacity	324.32			20.0

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

SEP 07 1991

FROM CONFIDENTIAL

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE **151** PSI CASING WEIGHT - SURFACE AREA (3.14 x R²)

PRESSURE LIMIT _____ PSI BUMP PLUG TO _____ PSI

ROTATE _____ RPM RECIPROCATATE _____ FT No. of Centralizers **2**

Floor	TYPE	COFFEE PLATE	Stage Tool	TYPE	
	DEPTH	324.32		DEPTH	
SHOE	TYPE	TX PATTERN	Stage Tool	TYPE	
	DEPTH	347.26		DEPTH	

Head & Plugs TBG D.P. SQUEEZE JOB

Double SIZE WEIGHT GRADE THREAD

Single GRADE WEIGHT THREAD

Swage GRADE WEIGHT THREAD

Knockoff THREAD

TOP NEW USED

BOT NEW USED

TOOL TYPE DEPTH

TAIL PIPE: SIZE DEPTH

TUBING VOLUME Bbls

CASING VOL. BELOW TOOL Bbls

TOTAL Bbls

ANNUAL VOLUME Bbls

TIME	PRESSURE		VOLUME PUMPED bbl		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	TIME	DATE	TIME	DATE	TIME	DATE	
0001 to 2400											
1953	2800										
1954		110	10		5	File 8.32					
1956		110	74	10	6	Con 15.8					
2009		60		84	-						
2011				84	-						
2011			21	84	3	File 8.32					
2016		190		94	2						
2018		180		99	1						
2023		210		105	-						
2023		160									

REMARKS: PRE-JOB SAFETY MEETING
 PRESSURE TEST LINES
 START F/H2O ahead
 F/H2O PUMPED START CEMENT
 CEMENT PUMPED SHOT DW
 Drop TOP Plug
 START DISPLACEMENT
 SLOW RATE
 SLOW RATE
 BUMP TOP Plug
 Close in Head + manifold

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1.	350	1.18	CLASS A 20% Si + 14" SK 029				74	15.8
2.								
3.								
4.								
5.								
6.								

BREAKDOWN FLUID TYPE _____ VOLUME _____ DENSITY _____ PRESSURE MAX. **210** MIN: _____

HESITATION SQ. RUNNING SQ. CIRCULATION LOST YES NO Cement Circulated To Surf. YES NO Bbls

BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. **21** Bbls TYPE OIL STORAGE BRINE WATER
 WASHED THRU PERIS YES NO TO FT. MEASURED DISPLACEMENT WIRELINE WELL GAS INJECTION WILDCAT

PERFORATIONS _____ CUSTOMER REPRESENTATIVE **HAWK** DS SUPERVISOR **Greg Greenie**