

Operator Name HGB Oil Co./Edwin C. Schuett Lease Name Witt 'A' Well # 2

Sec. 2 Twp. 18S Rge. 43 East West County Greeley

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.)

Log	Formation (Top), Depth and Datum	Sample
Name	Top	Datum
Morrow Shale	5037	-1131
Stockholm Sand	5140	-1234
B/ " "	5157	-1251
Lower Morrow Ls	5159	-1253
Mississippi	5202	-1296

List All E.Logs Run:

BPB Dual Induction; BPB CNL-FDL

DST #1 5018-5175 op30, SI60, op60, SI60. 1st op GTS @MAX 319MCF dec to 220MCF. 2nd op GTS @ max194 MCF dec to 58 MCF. Rec 850' clean gassy oil & 350' G & OCM. HMP 2543#-2503#. IF374#-332#, FF 343# - 395#, SIP 395#- 395#.

CASING RECORD New 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 3/4"	8 5/8"	20	352	60-40 poz	200	3% CC, 2%qe
production	7 7/8"	5 1/2"	14	5215	class A	150	3% KCl

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input checked="" type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	0 2179	lite	550	1/4#/sx flocele

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
4	5148 - 5154		

TUBING RECORD Size 2 7/8" Set At 5185 Packer At _____ Liner Run Yes No

Date of First, Resumed Production, SWD or Inj. 7-26-93 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours Oil 155 Bbls. Gas TSTM Mcf Water 12 Bbls. Gas-Oil Ratio 36 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 5148-5154

Phone 913-483-2627, Russell, Kansas
 Phone 316-793-5861, Great Bend, Kansas

ORIGINAL

Phone Plainville 913-434-2812
 Phone Ness City 913-798-3843

ALLIED CEMENTING CO., INC. 5018
 Home Office P. O. Box 31 Russell, Kansas 67665

Date	6-27-93	Sec.	2	Twp.	18	Range	43	Called Out	4:30 pm	On Location	8:00 am	Job Start	1:00 am	Finish	2:00 am	
Lease	Witt A	Well No.	#2	Location				Tribune 16W-3 1/2 N-4 E	County	Greerley	State	KS				

Contractor	Emphasis Well #10	
Type Job	Long String	
Hole Size	7 7/8	T.D. 5250
Csg.	5 5/8 15.5	Depth 5215
Tbg. Size		Depth
Drill Pipe		Depth
Tool Joint	Part Collar @ 2175	Depth
Cement Left in Csg.		Shoe Joint 29.69
Press Max.		Minimum
Meas Line		Displace 124.5 Bbls
Perf.		

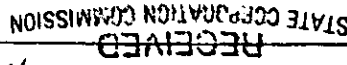
Owner	HGB Oil
To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Charge To	HGB Oil
Street	
City	State
The above was done to satisfaction and supervision of owner agent or contractor.	
Purchase Order No.	
X	Long String
CEMENT	
Amount	500 gal Mud Sweep
Ordered	150 sk A 3/8 KCL .6" FL-28
Consisting of	
Common	150 sk
Poz. Mix	
Get. KCL	423 lbs
Grout	FL-28 85 lbs
Quickset Mud Sweep	500 gal
Sales Tax	
Handling	
Mileage	
Sub Total	102
Total	

EQUIPMENT

Pumptrk	No. 300	Cementer	Fitz
		Helper	Terry
Pumptrk	No.	Cementer	
		Helper	
Bulktrk	315	Driver	Steve
Bulktrk		Driver	

DEPTH of Job	5250 5215
Reference:	1 5 1/2 Rubber Plug
	1 Rotating head
Sub Total	
Tax	
Total	

Remarks:
 Mix Mud Sweep - Cement - Washout pump
 R+Lines - Release plug - Displace to
 Insect. Insect did hold
 Thank You
 Fitz & Crew

Floating Equipment	1 5 1/2 Guide Shoe
	1 5 1/2 AFU
	8 5 1/2 Centralizers
	1 5 1/2 Basket
	1 5 1/2 Part Collar
	

Phone 913-483-2627, Russell, Kansas
 Phone 316-793-5861, Great Bend, Kansas

ORIGINAL Phone Plainville 913-434-2812
 Phone Ness City 913-798-3843

ALLIED CEMENTING CO., INC. 5364

Home Office P. O. Box 31

Russell, Kansas 67665

new

Date	6-18-93	Sec.	2	Twp.	18	Range	43	Called Out	1:15 AM	On Location	5:35 AM	Job Start		Finish	11:45 AM
Lease	Witt	Well No.	A-2	Location	Tribune W to State Line			County	Greeley	State	Kan				

Contractor	Emphasis Oil Oper #10	
Type Job	Surface	
Hole Size	12 1/4	T.D. 353'
Csg.	8 5/8	Depth 352'
Tbg. Size		Depth
Drill Pipe		Depth
Tool		Depth
Cement Left in Csg.	15'	Shoe Joint
Press Max.		Minimum
Meas Line		Displace <input checked="" type="checkbox"/>
Perf.		

Owner	Same 34
To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Charge To	H. G. B. Oil Co.
Street	1616 Glenwood Place, #1804
City	Denver State Co. 80202
The above was done to satisfaction and supervision of owner agent or contractor.	
Purchase Order No.	
X <i>[Signature]</i>	
CEMENT	
Amount Ordered	200 sks 6 1/4 per, 3% cc - 2% cel
Consisting of	
Common	
Poz. Mix	
Gel.	
Chloride	
Quickset	
Sales Tax	
Handling	1.00 per sk
Mileage	4¢ per sk/mile
Sub Total	
Total	

EQUIPMENT


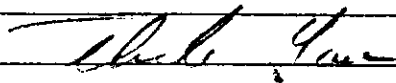
No.	Cementor	Walt Steve
Pumptrk 191	Helper Hays	
No.	Cementor	
Pumptrk	Helper	
	Driver	
Bulktrk 315		
Bulktrk	Driver	

DEPTH of Job

Reference:	Pumptruck	
	8 5/8 wooden Plus	
	2.25 per mile	
	Sub Total	
	Tax	
	Total	

Remarks:

Cement Dis? Circ

Floating Equipment	
	
	

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Allied" shall mean Allied Cementing Co., Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

—**TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "ALLIED" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "ALLIED," refunded directly to "CUSTOMER." For purposes of this paragraph, ALLIED and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

—**ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the terms of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limited to, a reasonable sum as and for attorney's fees:

—**PRICES AND TAXES:** All merchandise listed in "ALLIED'S" current price schedule are F.O.B. ALLIED'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by ALLIED shall be added to the quoted prices charged to CUSTOMER.

—**TOWING CHARGES:** ALLIED will make a reasonable attempt to get to and from each job site using its own equipment. Should ALLIED be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by ALLIED, will be charged to and paid by CUSTOMER.

—**PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay ALLIED for the expenses incurred by ALLIED as a result of the cancellation.

—**DEADHAUL CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charge as set forth in ALLIED'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

—**SERVICE CONDITIONS AND LIABILITIES:** 1. ALLIED carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond ALLIED'S control, ALLIED shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless ALLIED, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.

2. With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.

3. ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by ALLIED of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of ALLIED or its employees in the preparation or furnishing of such facts, information or data.

(C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent and ALLIED will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

Phone 913-483-2627, Russell, Kansas
 Phone 316-793-5861, Great Bend, Kansas

ORIGINAL

Phone Plainville 913-434-2812
 Phone Ness City 913-798-3843

ALLIED CEMENTING CO., INC.

5034

Home Office P. O. Box 31

Russell, Kansas 67665

New

Date	7-8-93	Sec.	2	Twp.	18S	Range	43W	Called Out	9:00 AM	On Location	300 PM	Job Start	4:45	Finish	6:30 PM
Lease	with A	Well No.	2	Location				Tribunal - W. of the State Line Rd. - 3 1/2 N - E. into Greeley				County	Greeley	State	KS

Contractor	Patrick Well Service	
Type Job	Port Collar	
Hole Size		T.D.
Csg. 5 1/2	15.5 #	Depth
Tbg. Size 2 7/8		Depth
Drill Pipe		Depth
Tool		Depth
Cement Left in Csg.		Shoe Joint
Press Max.		Minimum
Meas Line		Displace
Perf.		

Owner HGB Oil Corp
 To Allied Cementing Co., Inc.
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To HGB - In Care of Sharp Eyes
 Street P.O. Box 122
 City Andover State KS, 67002

The above was done to satisfaction and supervision of owner agent or contractor.

EQUIPMENT

No.	Cementer	Ken
Pumptrk 300	Helper	Fitz
No.	Cementer	
Pumptrk	Helper	
	Driver	
Bulktrk 305		Steve
Bulktrk 315	Driver	Walt

Purchase Order No.

X Camp Shop

(used 425 sks) CEMENT

Amount Ordered 550 SK Lite Cement 1/4 Cellulose

Consisting of 500 gal Mud Sweep

Lite, 425 SKs @ 5.85	2,486.25
Mud Sweep 500 gal @ 1.80	900.00
Handling 1.00 per SK	425.00
Mileage 4¢ per SK mile	1,700.00
100 mile	
Sub Total	5,511.25

Total 5,511.25

DEPTH of Job 2193

Reference:	Pumptruck	525.00
	225 per mile	225.00
	Sub Total	
	Tax	
	Total	750.00

Remarks: test tbg & csg to 1000 PSI. Pressure Held. Open Port Collar & pump water to establish circulation. Pump 500 gal mud sweep & mix 550 SK. lite cement. Cement circulated before done mixing. Displace, close tool & test to 1000 PSI. Pressure Held. Rev. Port cement.

Floating Equipment

66619 T 60V

STATE CORPORATION COMMISSION RECEIVED

AUG 16 1993

Handwritten signatures and notes.

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(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.

2. With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.

3. ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

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(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of ALLIED or its employees in the preparation or furnishing of such facts, information or data.

(C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent and ALLIED will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

TRILOBITE TESTING, L.L.C. ORIGINAL

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name WITT "A" #2 Test No. 1 Date 6/26/93
Company HGB OIL COMPANY Zone MORROW
Address 1616 GLENARM PLACE #1804 DENVER CO 80202 Elevation 3905
Co. Rep./Geo. RICHARD HALL Cont. EMPHASIS RIG #10 Est. Ft. of Pay 6
Location: Sec. 2 Twp. 18S Rge. 43W Co. GREELEY State KS

Interval Tested 5018-5175 Drill Pipe Size 4.5" XH
Anchor Length 157 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 5013 Drill Collar - 2.25 Ft. Run 120
Bottom Packer Depth 5018 Mud Wt. 9.4 lb/Gal.
Total Depth 5175 Viscosity 58 Filtrate 11.4

Tool Open @ 10:15 Initial Blow STRONG BLOW OFF BOTTOM IN 1 1/2 MINUTES
GAS TO SURFACE @ 6.5 MIN ON 1" ORIFICE/ISI: BLED OFF BLOW-STRONG OFF BTM
Final Blow STRONG RETURN OFF BOTTOM IN 30 SECONDS-GAUGED 1/2" ON
3/4" ORIFICE = 56000 MCF/DAY @ FINAL

Recovery - Total Feet 1200 Flush Tool? NO

Rec. 3975 Feet of GAS IN PIPE
Rec. 850 Feet of CLEAN GASSY OIL-40%GAS/60%OIL
Rec. 350 Feet of GSY OIL CUT MUD-25%GAS/25%OIL/50%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 122 °F Gravity 37 °API ● 92 °F Corrected Gravity 34 °API
RW _____ ● _____ °F Chlorides _____ ppm Recovery Chlorides 7000 ppm System

(A) Initial Hydrostatic Mud 2575.2 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 386.7 PSI ● (depth) 5045 w / Clock No. 27573

(C) First Final Flow Pressure 357.6 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 400.2 PSI ● (depth) 5170 w / Clock No. 17640

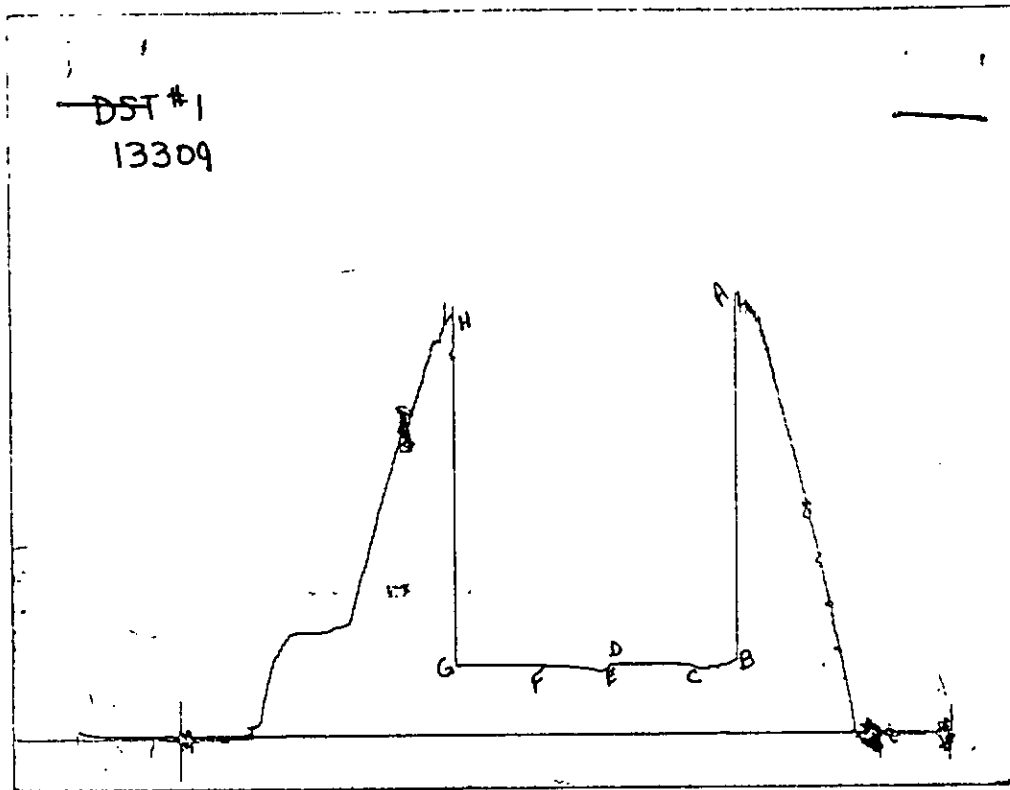
(E) Second Initial Flow Pressure 337.8 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 397.1 PSI ● (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 403.3 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2511.8 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative ROD STEINBRINK



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2543	2575.2
(B) FIRST INITIAL FLOW PRESSURE	374	386.7
(C) FIRST FINAL FLOW PRESSURE	332	357.6
(D) INITIAL CLOSED-IN PRESSURE	395	400.2
(E) SECOND INITIAL FLOW PRESSURE	343	337.8
(F) SECOND FINAL FLOW PRESSURE	395	397.1
(G) FINAL CLOSED-IN PRESSURE	395	403.3
(H) FINAL HYDROSTATIC MUD	2503	2511.8

ORIGINAL

15-071-20591-0000

COMPUTER OIL EVALUATION BY TRILOBITE TESTING, L.L.C.

HGB OIL COMPANY

WITT "A" #2

DST 1

2 18S 43W GREELEY KS

ELEVATION:	3905	KB	EST. PAY	6	FT
DATUM:	-1266		ZONE TESTED:	MORROW	
TEST INTERVAL:	5018-5175		TIME INTERVALS:	30-60-60-60	
RECORDER DEPTH:	5170		VISCOSITY:	3.77	CP
BOTTOM HOLE TEMP:	122		HOLE SIZE:	7.875	IN

CUBIC FEET OF GAS IN PIPE:	3625			
TOTAL FEET OF RECOVERY:	1200.00	CORRECTED PIPE FILLUP:	1073.243	
TOTAL BARRELS OF RECOVERY:	15.94	CORR. BARRELS OF RECOVERY:	14.138	BBL
BARRELS IN DRILL PIPE:	15.36	API GRAVITY:	34	
BARRELS IN WEIGHT PIPE:	0.00	FLUID GRADIENT:	0.370	
BARRELS IN DRILL COLLARS:	0.59			
GAS OIL RATIO:	227.35	CU.FT/BBL		
BUBBLE POINT PRESSURE:	405			
UNCORRECTED INITIAL PRODUCTION:			255.11	BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:			226.22	BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:			30.923	

INITIAL SLOPE	14.20	PSI/CYCL	FINAL SLOPE	3.95	PSI/CYCLE
INITIAL P*	403.81	PSI	FINAL P*	404.87	PSI

TRANSMISSIBILITY	9309.14	(MD.-FT./CP.)
PERMEABILITY	5852.19	(MD.)
INDICATED FLOW CAPACITY	35113.15	(MD.FT)
PRODUCTIVITY INDEX	10.52	(BARREL/DAY/PSI)
DAMAGE RATIO	0.36	
RADIUS OF INVESTIGATION	725.74	(FT,)
POTENTIOMETRIC SURFACE	-326.10	(FT.)
DRAWDOWN FACTOR	-0.264	(%)

CALCULATED RECOVERY ANALYSIS

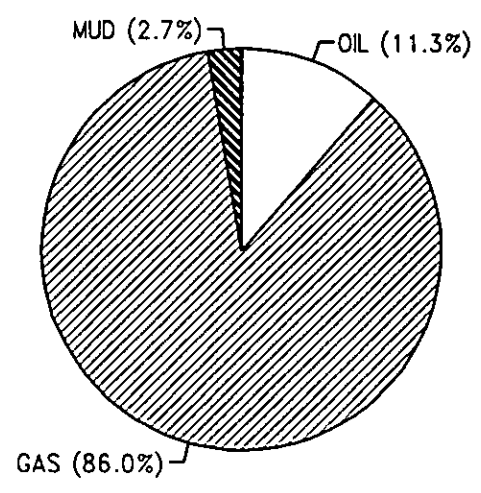
DST

TICKET #

5945

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	3975	100	3975		0		0		0
PIPE 2	850	40	340	60	510		0		0
3	230	25	57.5	25	57.5		0	50	115
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1			0		0		0		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1	120	25	30	25	30		0	50	60
COLLAR 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	5175		4402.5		597.5		0		175

		HRS OPEN	BBL/DAY
BBL OIL=	8.21655 *	1.5	131.4648
BBL WATER=	0 *		0
BBL MUD=	1.9287		
BBL GAS =	62.32365		



ORIGINAL

INITIAL FLOW

RECORDER 13339

DST # 1

TIME(MIN)	PRESSURE	<>PRESSURE
0	386.7	386.7
3	363.8	-22.9
6	363.8	0.0
9	363.8	0.0
12	363.8	0.0
15	360.7	-3.1
18	365.9	5.2
21	346.1	-19.8
24	350.3	4.2
27	353.4	3.1
30	357.6	4.2

FINAL FLOW

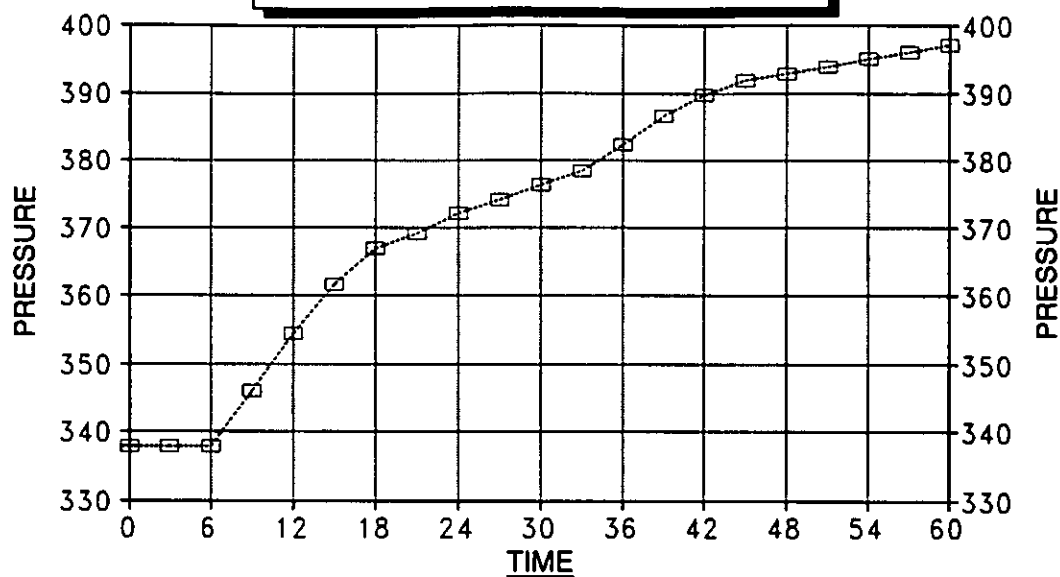
RECORDER 13339

DST # 1

TIME(MIN)	PRESSURE	<> PRESSURE
0	337.8	337.8
3	337.8	0.0
6	337.8	0.0
9	346.1	8.3
12	354.4	8.3
15	361.7	7.3
18	366.9	5.2
21	369.1	2.2
24	372.1	3.0
27	374.2	2.1
30	376.3	2.1
33	378.4	2.1
36	382.5	4.1
39	386.7	4.2
42	389.8	3.1
45	391.9	2.1
48	392.9	1.0
51	393.9	1.0
54	395.1	1.2
57	396.1	1.0
60	397.1	1.0

DELTA T DELTA P

FINAL FLOW / DST #1



--□-- WITT 'A' #2

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:

61.629

WITT "A" #2

DST #1

15071205910000

INITIAL

SHUTIN

30 INITIAL FLOW TIME

SLOPE

14.2 PSI/CYCLE

ORIGINAL

P*

403.81 PSI

Log <>

TIME(MIN)	Pws (psi)	Horn T	PRESSURE	Horn T
3	373.1	1.041	373.1	11
6	381.5	0.778	8.4	6
9	6.8	0.637	-374.7	4
12	388.9	0.544	382.1	4
15	391.9	0.477	3.0	3
18	395.1	0.426	3.2	3
21	397.1	0.385	2.0	2
24	398.1	0.352	1.0	2
X 27	399.2	0.325	1.1	2
30	400.2	0.301	1.0	2
33	400.2	0.281	0.0	2
36	400.2	0.263	0.0	2
39	400.2	0.248	0.0	2
42	400.2	0.234	0.0	2
45	400.2	0.222	0.0	2
48	400.2	0.211	0.0	2
51	400.2	0.201	0.0	2
54	400.2	0.192	0.0	2
X 57	400.2	0.184	0.0	2

WITT "A" #2
FINAL

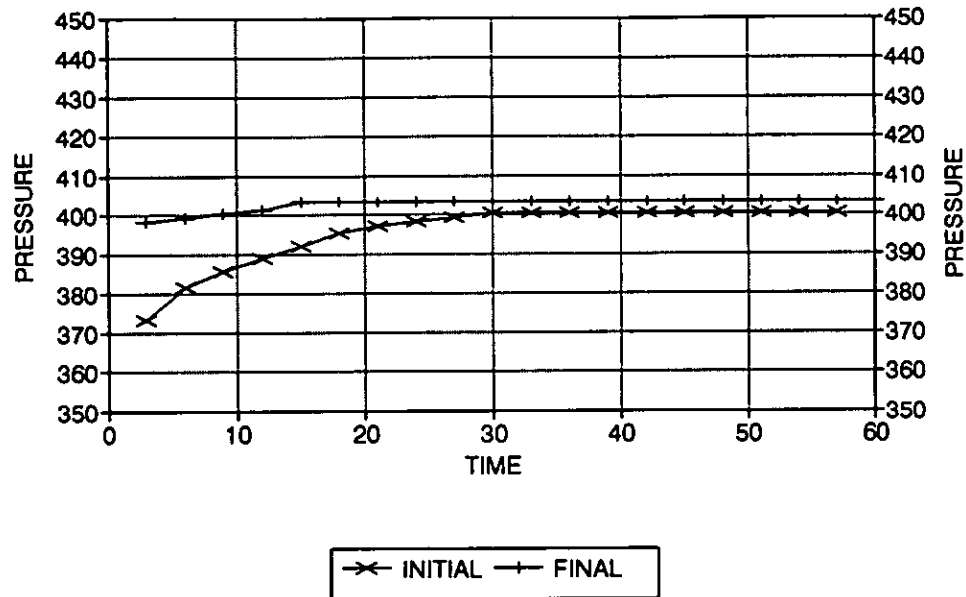
DST #1
SHUTIN
90 TOTAL FLOW TIME

SLOPE 4.0 PSI/CYCLE
P* 404.9 PSI

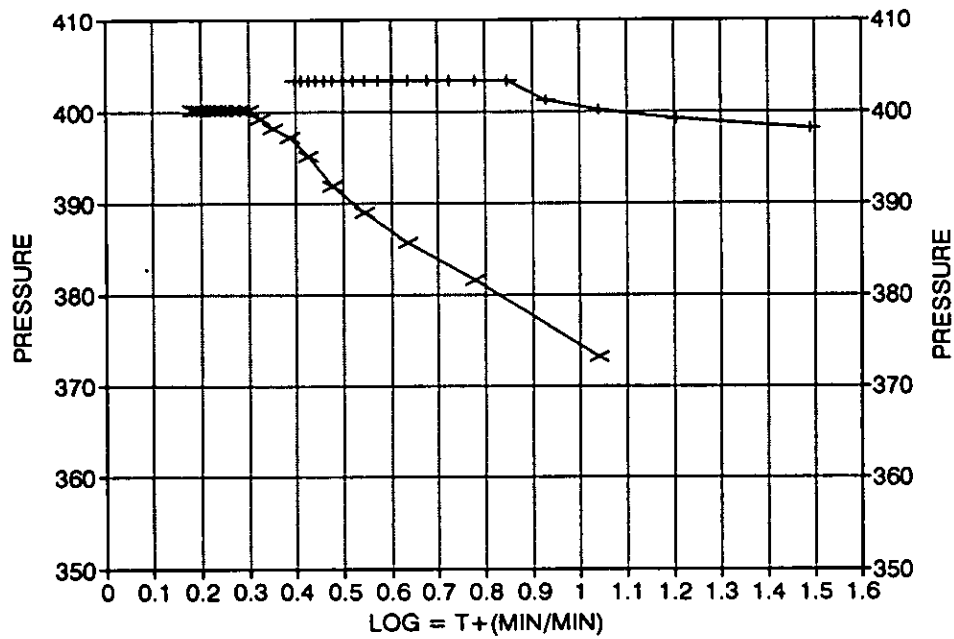
ORIGINAL

			Log	<>		
		Pws (psi)	Horn T	PRESSURE	Horn T	
		-----	-----	-----	-----	
		3	398.1	1.491	398.1	31
		6	399.2	1.204	1.1	16
		9	400.2	1.041	1.0	11
X		12	401.2	0.929	1.0	9
		15	403.3	0.845	2.1	7
		18	403.3	0.778	0.0	6
		21	403.3	0.723	0.0	5
		24	403.3	0.677	0.0	5
		27	403.3	0.637	0.0	4
		30	403.3	0.602	0.0	4
		33	403.3	0.571	0.0	4
		36	403.3	0.544	0.0	4
		39	403.3	0.520	0.0	3
		42	403.3	0.497	0.0	3
		45	403.3	0.477	0.0	3
		48	403.3	0.459	0.0	3
		51	403.3	0.442	0.0	3
		54	403.3	0.426	0.0	3
		57	403.3	0.411	0.0	3
X		60	403.3	0.398	0.0	3

WITT "A" #2 / DST #1
DELTA T DELTA P



HORNER PLOT



GAS VOLUME REPORT

C. G. G. W. L.

HGB OIL COMPANY

WITT "A" #2

DST # 1

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
1.5	BOTTOM OF BUCKET			0.5	BOTTOM OF BUCKET		
6.5	GTS	1"		5	10"	0.75"	44.8
10	4	1"	283	10	5	0.75"	175
15	5	1"	319	15	5	0.75"	175
20	4	1"	283	20	6	0.75"	194
25	3	1"	242	25	4	0.75"	156
30	2.5	1"	220	30	4	0.75"	156
				35	3	0.75"	133
				40	2	0.75"	108
				45	1.5	0.75"	93
				50	1	0.75"	76
				55	1	0.75"	76
				60	0.5	0.75"	58

Remarks: GAS IS FLAMMABLE AS LONG AS FLAME IS HELD TO IT

FLUID SAMPLER DATA

ORIGINAL

Ticket No.: 5945

Date: 6/26/93

Company: HGB OIL COMPANY

Lease: WITT "A" #2

Test No.: 1

County: GREELEY

Sec.: 2

Twp.: 18S

Rng.: 43W

SAMPLER RECOVERY

Gas 3800

Oil 100

Mud 100

Water

Other 4 CU FT

Pressure 475

TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity 34 corrected @60F

PIT MUD ANALYSIS

Chlorides 7000

Resistivity 0.85 ohms@ 70 F

Viscosity 58

Mud Wt. 9.4

Filtrate 11.4

Other

PIPE RECOVERY

TOP

Resistivity ohms@ F

Chlorides ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity 0.85 ohms@ 70 F

Chlorides 7000 ppm

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Test Ticket

5945

Well Name & No. With 'A' #2 Test No. 1 Date 6-26-93
 Company HGB Oil Company Zone Tested Morrow
 Address 1616 Glenarm Place #1804 Denver, CO. 80202 Elevation 3905 (KB)
 Co. Rep./Geo. Richard Hall cont. Emphasis #10 Est. Ft. of Pay 6'
 Location: Sec. 2 Twp. 18 S Rge. 43 W Co. Greeley state KS.
 No. of Copies 31 Distribution Sheet X Yes No Turnkey Yes X No Yes Evaluation

Interval Tested 5018 - 5175 Drill Pipe Size 4 1/2" XH
 Anchor Length 157' Top Choke — 1" Bottom Choke — 1/4"
 Top Packer Depth 5013 Hole Size — 77/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 5018 Wt. Pipe I.D. — 2.7 Ft. Run
 Total Depth 5175 Drill Collar — 2.25 Ft. Run 120'
 Mud Wt. 9.4 lb/gal. Viscosity 58 Filtrate 11.4

Tool Open @ 10:15 am (CDT) Initial Blow Strong blow off bottom in 1 1/2 mins.
GTS @ 6 1/2 mins on 1" orifice ISI: Bled off blow. Fair to strong off btm. 30 secs.
 Final Blow Strong return off bottom in 30 secs. gauged 1/2" on 3/4" orifice =
56,000 mcf/day @ Final

Recovery — Total Feet 1200' Feet of Gas in Pipe GTS Flush Tool? NO

Rec.	Feet Of	%gas	%oil	%water	%mud
<u>850'</u>	<u>CGO</u>	<u>40</u>	<u>60</u>	<u>—</u>	<u>—</u>
<u>350'</u>	<u>GOCM</u>	<u>25</u>	<u>25</u>	<u>—</u>	<u>50</u>

BHT 122° °F Gravity 37 °API @ 92° °F Corrected Gravity 33.8 °API

RW @ °F Chlorides ppm Recovery Chlorides 7,000 ppm System

- (A) Initial Hydrostatic Mud 2543 PSI AK1 Recorder No. 13309 Range 4700
- (B) First Initial Flow Pressure 374 PSI @ (depth) 5045 w/Clock No. 27573
- (C) First Final Flow Pressure 332 PSI AK1 Recorder No. 13339 Range 4025
- (D) Initial Shut-In Pressure 395 PSI @ (depth) 5170 w/Clock No. 17640
- (E) Second Initial Flow Pressure 343 PSI AK1 Recorder No. Range
- (F) Second Final Flow Pressure 395 PSI @ (depth) w/Clock No.
- (G) Final Shut-In Pressure 395 PSI Initial Opening 30 Test
- (H) Final Hydrostatic Mud 2503 PSI Initial Shut-in 60 Jars

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION 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.

Final Flow 60 Safety Joint X
 Final Shut-in 60 Straddle
 Circ. Sub X 35.00
 Sampler X
 Extra Packer
 Other Eval. X
 TOTAL PRICE \$

Approved By Rod Steinbrink

Our Representative Rod Steinbrink