15-067-10023-0000

ORIGINAL

INVOICE

051746 AP 23 93

54 - ULYSSES CO

HALLIBURTON SERVICES

A Halliburton Company

REMIT TO:
P.O. BOX 951046
DALLAS, TX 75395-1046

INVOICE NO.	DATE
345237	04/16/199

WELL LEASE NO./PLANT NAME	WELL/PLANT LOCATION	STATE	WELL/PLANT OWNER
SALT CAVITY STORAGE UNIT [redacted]	GRANT	KS	SAME

SERVICE LOCATION	CONTRACTOR	JOB PURPOSE	TICKET DATE
LIBERAL	NONE	PLUG TO ABANDON	04/16/199

ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO
018939	JOE EUDEY	761448 03 4		COMPANY TRUCK	4952

AMOCO PRODUCTION CO (USA)
ULYSSES OPERATIONS CENTER
2225 WEST OKLAHOMA AVENUE
ULYSSES, KS 67880

DIRECT CORRESPONDENCE TO:
FIRST OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2050
OKLAHOMA CITY, OK 73102-5601

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
PRICING AREA - EASTERN AREA1					
000-117	MILEAGE	10	MI	2.75	27.50
		1	UNT		
009-019	PLUGGING BK SPOT CEMENT OR MUD	1580	FT	1,120.00	1,120.00
		1	UNT		
009-027	CMT THRU TBG-DRILL STEM ADD HR	5	HR	195.00	975.00
		1	UNT		
504-043	CEMENT - PREMIUM	686	SK	8.69	5,961.34
500-207	BULK SERVICE CHARGE	686	CFT	1.25	857.50
500-306	MILEAGE CMTG MAT DEL OR RETURN	322.420	TMI	.85	274.06
504-043	CEMENT - PREMIUM	686	SK	8.69	5,961.34
500-207	BULK SERVICE CHARGE	686	CFT	1.25	857.50
500-306	MILEAGE CMTG MAT DEL OR RETURN	322.420	TMI	.85	274.06
	INVOICE SUBTOTAL				16,308.30
	DISCOUNT-(BID)				4,077.04-
	INVOICE BID AMOUNT				12,231.26
	INVOICE TOTAL - PLEASE PAY THIS AMOUNT ==================>				$12,231.26

ULYSSES
___ Ulysses Plant ___ SUB ___ FEA
APPN# ___ DOS ___ OP CENTER ___
___ In House Code ___ Ho ___ CG
Charge to: Ulysses Gas Plant
Used For: P&A Salt Cavity Well 673010
DRA acct 7646-18
___ Haul & Dispose Salt Water
___ Expense ___ Investment ___ MPF ___ PF
Environment: ___ Land ___ Air ___ Water
___ Rep. (Form 5588) ✓ P & A
___ Incomplete ___ Recomplete
Acct ___ Sub ___ Fea ___
Approved: J. P. Eudey 5GG
J P Eudey Date ___

FIX JOB TKT

TERMS INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE. UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED, CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT, CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND ATTORNEY FEES IN THE AMOUNT OF 20% OF THE AMOUNT OF THE ...

M 1900-R4

15-067-00449-0000

GEARHART
THE GO COMPANY

GEARHART INDUSTRIES, INC.
WIRELINE SERVICES
P.O. BOX 1258 / FORT WORTH, TEXAS 76101

#1

JOB TICKET
214941

Engineer: R. Bruce

Operators: M. Duncan
R. Newberry

Legal Description: 3-29S-30W

Bill To: Amoco Production Co.
Address: Box 432
City: Liberal, Ks. 67901
Lease and Well No.: SCSW #1
Field: Ulysses County: Grant
Job No.: 5168-440 State: Kansas

Invoice No.:
Invoice Date:
Customer's Order No.:
Date of Service: 11-4-82
Liberal, Ks.
R & S Code: 1-21-077

CONDITIONS OF THIS CONTRACT

TO GEARHART INDUSTRIES, INC.

You are hereby requested to furnish the service and materials and equipment herein set forth upon the following terms and conditions to wit:

The undersigned, as customer, agrees to pay you for the services and/or materials ordered hereunder at the office of Gearhart Industries, Inc., Fort Worth, Texas. Should any account not be paid within the term fixed by the invoice, interest will be charged at the rate of ten per cent (10%) per annum from date of such invoice.

In the event you employ an attorney to enforce any claims of indebtedness against the undersigned customer, said customer agrees to pay all costs of collection and reasonable attorney's fees which, in no event, shall be less than the sum of $75.00.

The above described work shall be performed by you as an independent contractor. However, it is understood and agreed that you do not guarantee the results of your service and shall not be liable for injury to persons or to property of well owners and/or customers unless caused by your willful negligence, this provision applying, but not limited to, sub-surface damage and surface damage arising from subsurface damage. Well owner and/or customers shall be responsible for and secure you against any liability for reservoir loss or damage or personal or property damage arising from a well blowout, unless such loss or damage is caused by your willful negligence. The well owner or drilling company will pay for the actual cost of replacing or repairing the well service equipment, or any part thereof, if same should be lost or damaged while being used in performing the work on the above described well.

Should any of your instruments, tools, or equipment be lost or destroyed in the rendition of your service, customer agrees to use all reasonable diligence and facilities available to recover the same, and customer agrees to reimburse you for the reasonable value of any instrument, tools, or other personal property that cannot be recovered within (60) days, or for the cost of repairing any damage to items recovered.

Customer agrees that all depth measurements shall be made by it or its employees, and shall be supervised by customer or its employees.

Customer certifies that it is the owner of the well on which the work herein ordered is to be done or that it has the full right and authority to order such work done on such wells; and that the well in which the work is to be done by you is in proper and suitable condition for the performance of said work.

Customer further agrees that the terms and conditions herein set forth constitute the entire agreement and that no employee of your company is authorized to alter the terms hereof. I have read and understand the terms of this agreement and represent that I am authorized to sign the same as agent of customer.

Customer ____________ Agent ____________

DESCRIPTION	PRICE	AMOUNT
1000-001 Service Charge		
4075-010 Run 7" Junk Basket & Guage Ring to 1778'		
4000-005 Set 7" CIBP @ 1650'		
Bid Price		1,300.00
1000-194 Portable Mast 'B' Type Bid Price		200.00
Total Bid Price		$1,500.00

REMARKS NOTE: PRICES SHOWN ARE ESTIMATES AND SUBJECT TO CHANGE BY ACCOUNTING DEPARTMENT

Thank you!

WS-467 7-80

CUSTOMER'S COPY

HALLIBURTON SERVICES
JOB SUMMARY

FORM 2025

DIVISION Wichita, KS

HALLIBURTON LOCATION Liberal, KS

BILLED ON TICKET NO. 565077

CUSTOMER Amoco

LEASE Salt Comity Sheriff

WELL NO. 1

JOB TYPE Plug Back

DATE 11-6-92

WELL DATA

FIELD ______ SEC. ______ TWP. ______ RNG. ______ COUNTY Grant 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	U	20#	7"	GL		
LINER						
TUBING			2 7/8	GL	1545	
OPEN HOLE						SHOTS/FT.
PERFORATIONS	B.P.	set	at	1650		
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE Nov 6th	DATE Nov 6th	DATE Nov 6th	DATE Nov 6th
TIME 0400	TIME 0710	TIME 0833	TIME 1010

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
R. Eichelberger	29459 Pickup	Liberal, KS
E. Davis	7183 Pump	Liberal, KS
T. Lamberson	15847 Bulk	Hugoton, KS

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 Plug Back

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

CUSTOMER REPRESENTATIVE X

HALLIBURTON OPERATOR [signature]

COPIES REQUESTED ______

CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	320	H	H	Howco		None	1.15	15.6

SUMMARY

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 ______

VOLUMES

PREFLUSH: BBL.-GAL. ______ TYPE ______

LOAD & BKDN: BBL.-GAL. ______ PAD: BBL.-GAL. ______

TREATMENT: BBL.-GAL. ______ DISPL: BBL.-GAL. None

CEMENT SLURRY: BBL.-GAL. ______

TOTAL VOLUME: BBL.-GAL. 67

REMARKS

CUSTOMER

HALLIBURTON SERVICES
A Division of Halliburton Company
DUNCAN, OKLAHOMA 73536
FORM 1908 R-3

WORK ORDER CONTRACT AND PRE-TREATMENT DATA

ATTACH TO INVOICE & TICKET NO. 565077

DISTRICT Liberal, KS DATE 11-6-92

TO: HALLIBURTON SERVICES YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO: Amoco (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. 1 LEASE Salt Cavity Storage SEC. ______ TWP. ______ RANGE ______

FIELD ______ COUNTY Grant STATE KS OWNED BY Amoco

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME ______ TYPE ______

FORMATION THICKNESS ______ FROM ______ TO ______

PACKER: TYPE ______ SET AT ______

TOTAL DEPTH ______ MUD WEIGHT ______

BORE HOLE ______

INITIAL PROD: OIL ______ BPD, H2O ______ BPD, GAS ______ MCF

PRESENT PROD: OIL ______ BPD, H2O ______ BPD, GAS ______ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	U	20	7"	GL		
LINER						
TUBING			2 7/8	GL	1545	
OPEN HOLE						SHOTS/FT.
PERFORATIONS	BP		at	1650	—	
PERFORATIONS						
PERFORATIONS						

PREVIOUS TREATMENT: DATE ______ TYPE ______ MATERIALS ______

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ☑ ANNULUS ☐ CASING ☐ TUBING/ANNULUS ☐ HYDRAULIC HORSEPOWER ORDERED ______

Plug Back
Run 15 separate Plugs From 1650 to Surface
320 sks H mixed at 15.6#/gal
with [illegible] Slurry

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

As consideration, the above-named Customer agrees:

(a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.

(b) Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.

(c) Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure, losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.

(d) Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.

(e) Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.

(f) Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or service.

(g) Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.

(h) Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be responsible for any damages arising from the use of such information except where due to Halliburton's gross negligence or willful misconduct in the preparation or furnishing of it.

(i) Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.

(j) Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable but never to exceed 18% per annum. In the event it becomes necessary to employ an attorney to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account.

(k) This contract shall be governed by the law of the state where services are performed or equipment or materials are furnished.

(l) Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED ______
CUSTOMER

DATE ______

TIME ______ A.M. P.M.

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

HALLIBURTON SERVICES

JOB LOG

WELL NO. 1 LEASE TICKET NO. 565077

CUSTOMER Amoco PAGE NO. 1

JOB TYPE Plug Back DATE 11-6-92

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	0900							Called Out
	0710							On location
								Waiting on Rig Crew to Arrive
	0745							Rig Crew out to swab hole
	0825							Swabbing Completed
	-							Hook up to Pump
1	0833							Pumping 1st Plug
								All Plugs class H mixed at 15.6 #/gal
								4 bbl slurry = 100' Plug
								Rig Pulling Tubing
2	0838	2	4			0		Pumping 2nd Plug
	0840							Rig Pulling Tubing
3	0844	2	4			0		Pumping 3rd Plug
	0847							Rig Pulling Tubing
4	0849	2	4			0		Pumping 4th Plug
	0852							Rig Pulling
5	0855	2	4			0		Pumping 5th Plug
	0858							Rig Pulling
6	0900	2	4			0		Pumping 6th Plug
	0903							Rig Pulling
7	0905	2	4			0		Pumping 7th Plug
	0908							Rig Pulling
8	0911	2	4			0		Pumping 8th Plug
	0914							Rig Pulling
9	0916	2	4			0		Pumping 9th Plug
	0919							Rig Pulling
10	0920	2	4			0		Pumping 10th Plug
	0923							Rig Pulling
11	0926	2	4			0		Pumping 11th Plug
	0929							Rig Pulling
12	0931	2	4			0		Pumping 12th Plug
	0934							Rig Pulling
13	0936	2	4			0		Pumping 13th Plug
	0939							Rig Pulling
14	0942	2	4			0		Pumping 14th Plug
	0945							Rig Pulling all Tubing Remaining

CUSTOMER

HALLIBURTON SERVICES

JOB LOG

WELL NO. 1 LEASE Salt Cavity Storage TICKET NO. 565077

CUSTOMER Amoco PAGE NO. 2

JOB TYPE Plug Back DATE 11-6-82

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
15	0950	1	11			0		Fill hole to Surface
								Tubing cut of Casing
	1010							Casing Plugged to surface
								JOB Completed

CUSTOMER

SCSW# 1, 3, 4, 5

Amoco Production Company
Post Office Box 432
Liberal, Kansas 67901
316-624-6241

J.D. Harris
District Superintendent

Don Ubel
225-05-96

November 29, 1982

Mr. Steve Durant
Kansas Corporation Commission
302 West McArtor
Dodge City, Kansas

File: LAB-1429-980.2

Dear Mr. Durant,

Plugging Report on Underground Storage Well
Project at the Ulysses Gasoline Plant

In response to your conversation with Mr. Tom Grauberger, Plant Foreman at the Ulysses Plant, the following report details the plugging of salt cavity storage wells (SCSW) Nos. 1, 3, and 4, and the conversion of No. 5 to a deep observation well. The details concerning each well will be given individually.

Salt Cavity Storage Well No. 1:

On November 4, 1982, Gearhart's mast truck was rigged up to set the cast iron bridge plug (CIBP). A junk basket and gauge ring with collar locator was run into the hole. Several collars were located at the bottom of the casing. The basket assembly was pulled out. The CIBP was run in and set at 1650'. The mast truck was moved off the hole.

On November 5, 1982, Patrick Well Service was rigged up. Tubing was run into the hole and the brine was swabbed out into a salt water storage tank. The swabbing operation was completed on November 6, 1982.

Halliburton then pumped 67 barrels of 15.6 lb/gallon class H cement slurry into the hole to fill it from 1650' to the surface. The cementing operation was performed in 15 separate stages. The tubing was raised 110' in between each cementing stage until the hole was completely full.

Salt Cavity Storage Well No. 3:

On November 2, 1982, Patrick Well Service was rigged up and the existing 2 7/8" tubing was pulled. Gearhart then rigged up and ran a junk basket and gauge ring with collar locator into the hole. The last two collars of the casing were located. The basket assembly was pulled. The CIBP was then run into the hole and set at 1635'.

On November 3, 1982, Gearhart perforated the interval of 1550' to 1600' during three trips with one shot per 5'. They were then rigged down and Patrick Well Service was rigged up. They ran 1630' of swabbing tubing and proceeded to swab the brine out of the hole. However, the fluid level could not be pulled down below 1350'. The swabbing operation was halted. One half hour later a check on the well showed that the fluid level was up to 1100'. Three hours after the swabbing was halted, the fluid level was up to 800'. A sample of the swabbing fluid revealed that a red, fine grained sand was present. The operations were shut down for the day.

A check of the well on the morning of November 4, 1982, revealed that the fluid was up to 600'. After a discussion between Mr. Don Ubel of the Kansas Department of Health and Environment and the Ulysses Plant engineer it was decided to plug Well No. 3. Halliburton was set up on the well and tubing was run down to 1440'. Fresh water was pumped in until the hole was full. Halliburton then pumped 15 plugs of 15.6 lb/gallon class H cement slurry into the hole using the same method as described above for Well No. 1.

Salt Cavity Storage Well No. 4

On November 3, 1982, Patrick Well Service was rigged up and the existing 2 7/8" tubing was pulled. Gearhart was rigged up on the hole. A junk basket and gauge ring were run into the hole and the bottom collars were located. The basket assembly was pulled and a CIBP was run into the hole and set at 1628'. Patrick Well Service was again rigged up on the hole. Tubing was run into the hole and the brine was swabbed out of the hole and into the brine pit.

Halliburton was again rigged up on the hole on November 4, 1982. Halliburton pumped 15 plugs of 15.6 lb/gallon class H cement slurry into the hole by the same method as described above.

Salt Cavity Storage Well No. 5

On November 5, 1982, Gearhart was rigged up. A junk basket and gauge ring with collar locator were run into the hole and the bottom collars were located. After the basket assembly was pulled a CIBP was run in and set at 1657'. Patrick Well Service was rigged up. Tubing was run into the hole and the brine was swabbed out of the casing and into the brine pit. The operation was halted when it was decided to use this well as an observation well.

Patrick Well Service pulled the swabbing tubing. Gearhart was rigged up on the hole and perforating tools were run into the hole. The fluid level was located at 1300' on the way down. The first gun was run from 1580' to 1600'. The tools were pulled up to 1000'. After 15 minutes the tools were run back down and the fluid level was located at 1200'. After another

Run a little cement on top of Plug
w/a glass bottom Bailer

discussion with Mr. Ubel it was decided not to perforate the remainder of the footage. Gearhart pulled their tools. The well head was replaced with one 30' joint of 2 7/8" tubing hanging from it to serve as the observation tubing.

Attached are the daily logs from the service companies which performed the work. If you have any questions concerning the plugging operation described above, please contact Dave Penner at (316) 624-6241 ext. 348.

Very truly yours,

J D Hamm

DMP/pw

Attachments

cc: T. H. Grauberger