API №. 15- <u>15-007-22533 0000</u>

Lounty Barber County Kansas

X_ *°

_ Feet

STATE CORPORATION CONNISSION OF KANSAS OIL & GAS CONSERVATION DIVISION WELL COMPLETION FORM

ACO-1 WELL HISTORY DESCRIPTION OF WELL AND LEASE

DESCRIPTION OF WELL AND LEASE	SE NW NW sec. 12 Twp. 33S Rgp. 12' x
Operator: License # 31632	990 Feet from S& (circle one) Line of Section
Bison Production Company	990 Feet from EW (circle one) Line of Section
	Footages Calculated from Nearest Outside Section Corner: NE, SE (NW)or SW (circle one)
City/State/Zip Wichita, Kansas 67206	tease Name Prothe Well , 1-12
Purchaser: N/A	Fleld Nees Rhodes
Operator Contact Person: C.J. Lett	Producing Formation N/A
Phone (<u>316</u> , 636–1801	Elevation: Ground 1434* rs 1442*
Contractor: Bono: Duke Drilling Co., Inc.	Total Depth 4395" PBTD 4480"
10 5929	Amount of Surface Pipe Set and Camented at 261. Fee
Wellsite Goologist Dean Patterson	Multiple Stage Comenting Collar Used?
Designate, Type of Completion	If yes, show depth set
Designate Type of Completion New Well Re-Entry Workover	If Alternate II completion, cement circulated from
	feet depth tow/sx cmt
X Dry Other (Core, WSW, Expl., Cathodic, etc)	Drilling Fluid Management Plan ALT 1754
<pre>!! Workover/Re-Entry: old well info as follows:</pre>	(Data must be collected from the Reserve Pit)
RELEASED	Chloride contentppe Fluid vojue 50 cbis
	Devetoring method used haul off - backfill
Comp. Date Old Total Danthia serial	N Oil
FROM CONFIDENTIAL COM	Location of fluid disposal if hauled office. W
	Rowers Drilling Co
Dual Completion Docket No. Other (SVD or Inj?) Docket No.	Cole SWD Sicondary 5435
03-29-97 04-06-97 04-06-97	Quarter Sec. 25 Typ. 325 s Rng. 12W E/W
Spud Date Date Reached ID Completion Date	County Barber Docket No. 19886
INSTRUCTIONS: An original and two copies of this form shall Derby Building. Wichita, Kansas 67202, within 120 days of Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on 112 months if requested in writing and submitted with the months). One copy of <u>all</u> wireline logs and goologist well reMUST BE ATTACHED. Submit CP-4 form with all plugged well	be filed with the Kansas Corporation Commission. 200 Colorado; the spud date, recompletion, workover or conversion of a well, side two of this form will be held confidential for a period of form (see rule 82-3-107 for confidentiality in excess of 12) sport shall be attached with this form. ALL CEMENTING TICKETS a. Submit CP-111 form with all temporarily abandoned wells:
All requirements of the statutes, rules and regulations promulgated with and the statements herein are complete and correct to the	ited to requiate the oil and gas industry have been fully complied best of my knowledge.
Signature	
Steven C. Anderson	5-97 F Letter of Confidentiality Attached
Subscribed and sworn to before see this 6th day of June	Vireline Log Received
19 <u>97</u>	Distribution
Notory Public Start Thadle	XCCSWD/RepKCPA
DATE OF EXPLID ANN THADPA-14-07	(Spec(fy))
NOTARY PUBLIC STATE OF KANSAS	
My Appl. Exp. 4-14-01	Form ACO-1 (7-91)

Operator Hame BIS	ON' PRODUCTIO	N COMPANY	SIDE YWO	PROT		₩ - [[#	1-12	
East			County Barber County, Kansas					
Sec. <u>12</u> Typ. 33	S. Rge12 r	XV West						
INSTRUCTIONS: Show interval tested, ti hydrostatic pressure if more space is need.	me tool open an es, bottom hole t	d closed, flowing emperature, fluid r	and shut-in pre	esures, when	her shut-in pr	esture rea	ched static lave.	
Drill Stem Tests Tab (Attach Additiona		X Yes C No	IX 100	Formati	on (Top), Depth	and Datumi		
Samples Sent to Geol	logical Survey	☐ _{fes}	Name		Тор		Datum	
Cores Taken		☐ Yes ☑ No	See at	tached		•		
Electric Log Run (Submit Copy.)		X Yes Wo	i		IS INFORMATI	ON CONF	IDENTIAL.	
List All E.logs Run:	Dual Induc Density Ne	tion, Compensa utron	ated				·	
		,		CON	IFIDENTIA	AL .	4 N	
	Report all	CASING RECORD	ں نا چہو نا		production, et	c .		
Purpose of String	Size Hale Drilled	Size Casing Set (In 0.0.)	Weight Lbs./ft	Setting Depth	Type of Cement	≠ Sacks Used		
Surface	12-1/4"	8-5/8"	20#	261	60/40 Poz	1.65	3%cc:2%ge1	
-			! 	! 	 	1	1	
	<u> </u>	AROITIGEA	L CEMENTING/SQUE	EZE RECORD		<u>-i</u>		
Purpose:	Depth]	Type o: Cement	Sacks Used	1	Type and Percen	t *dditiv•		
Perforate Protect Casing			<u> </u>	}				
Plug Back TD Plug Off Zone								
Shots Per Foot		RECORD - Bridge Plus of Each Interval I	- Total	:	Fracture, Shot, d Kind of Hater		ueeze Record Depth	
				,				
						· · · · · · · · · · · · · · · · · · ·		
YUBING RECORD	Size	Set At	Packer At	Liner Run	□ _{Y•1} □	Ko .		
Date of First, Resum	med Production,	SWD or Inj. Produ	ucing Method	lowing Dpu	mping Gas L	ift 🗆 ot	her (Explain)	
Estimated Production Per 24 Hours	n 011	Bbls Gas	Mcf Water	- Bbls.	Gas-Dil	Retio	Gravity	
isposition of Gas:			THOD OF COMPLETI				roduction Interval	
Vented U Sald (If vented, sub		دا	Hole Perf.	Li Du∎lty	Comp. L Comm	ingled _		

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Exhibit "A"

PROTHE #1-21 SE NW NW 12033S-12W Barber CO., KS API # 15-007-22533 0000

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DST#1

Test Interval: Formation: Tool Interval:

4370 - 4395' Mississippian Osage

15"-30"-30"-90"

IHP 2153# **IFP** 31-34# ISIP 95# **FFP** 32-33# **FSIP** 110# **FHP** 2116#

Preflow: Fair blow, building to 9" in bucket. Second Flow: Weak blow, building to 2" in bucket. Recovery: 250' gas in pipe, 10' drilling mud.

BHT:114 deg. F.

RELEASED

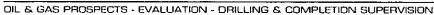
SEP 1 6 1998.

FROM CONFIDENTIAL

GEOLOGIC DATA:

Log KB Tops: Formation	Тор	Detum
KANWAKA SH.	336	B -1926
ELGIN SD.	349	
HEEBNER SH.	357	
SNYDERVILLE SD.	3594	
DOUGLAS GP.	3672	
LWR. IRELAND SD.	3617	
HASKELL LS.	3762	
LANSING GP.	3768	
STARK SH.	4180	
HUSHPUCKNEY SH.	4208	2764
BASE KC GP.	4232	2790
MARMATON LS.	4242	2800
PAWNEE LS	4344	-2902
LABETTE SH.	4361	-2919
CHEROKEE GP.	4370	
ERO. MISS. CHERT	4383	-2941

XPLORATION SERVICES, INC.



April 17, 1997

Bison Production Company 9320 E. Central Wichita, Kansas 67278 JUN 2 0

CONFIDENTIAL

HE: Geologic Report #1-12 Prothe 125' E of SE NW NW Sec.12-T33s-R12w Barber County, Kansas

Gentlemen.

The following report is a summary of the drilling operations regarding the above captioned well.

RECOMMENDATION:

Due to negative results of testing, poor zone development and log calculations it was recommended to the operator that the well be plugged in accordance with the rules and regulations of the KCC.

GENERAL WELL DATA:

RELEASED

Spud date: March 29, 1997 Drilling completed: April 5, 1997

SEP 1 6 1998

Contractor: Duke Drilling Co., Rig #2. John Armbruster, Toolpuster) M CONFIDENTIAL

Elevations: 1442' KB, 1441' DF, 1434' GL. All drilling operations measured from KB.

Rotary Total Depth: 4395' Logged Total Depth: 4395'

Casing: Surface; New 85/8" 20# set at 262' with 165 sxs 60/40 Pozmix, 3%CC, 2% gel by Allied; Cementing. Plug down 5:30 pm.

Production: None

Mud Program: MudCo Inc. Chemical Gel System. Gary Talbot; Engineer.

Geologic Program: 1' drilling time from 3300', 10' Dry samples from 3400'. 10' Wet samples from 3400'.

Open Hole Logs: ELI Logging, DIL / CNL / CDL, 5" from 3300' to 4392'.

Hole Deviation(s): 3/4 @ 262', 1 @ 4395'.

Formation Test(s): One by Superior Testers, Great Bend, Gene Budig tester.

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DST#1

(All Pressures are electronic recorder)

Test interval:

4370 - 4395'

Formation:

Mississippian Osage

Tool Interval:

IHP 2153#

15"-30"-30"-90"

IFP 31-34# ISIP 95# **FFP** 32-33#

FSIP 110# **FHP** 2116#

Preflow: Fair blow, building to 9" in bucket. Second Flow: Weak blow, building to 2" in bucket. Recovery: 250' gas in pipe, 10' drilling mud.

BHT:114 deg. F.

GEOLOGIC DATA:

Log KB Taps: Formation	Top Da	itum Pos	ition*			
KANWAKA SH.	3368	-1926	0,	·		
ELGIN SD.	3496	-2054	+1'	DEL CACED	•	
HEEBNER SH.	3575	-2133	-2'	RELEASED		
SNYDERVILLE SD.	3594	-2152	-3'			
DOUGLAS GP.	3672	-2230	-5'	SEP 1 6 1998		
LWR. IRELAND SD.	3617	-1994	+1'	OLI ! O III		
HASKELL LS.	3762	-2320	-7 [']			
LANSING GP.	3766	-2324	-9°	FROM CONFIDENTIAL		IANIS
STARK SH.	4180	-2738	-9'	1110	1991	Array Array
HUSHPUCKNEY SH.	4206	-2764	-10'		ي	SO
BASE KC GP.	4232		-g'		JUN	ASE
MARMATON LS.	4242	-5800	-9'		\sim	,
PAWNEE LS	4344	-2902	-8,		W	SE
LABETTE SH.	4361	-2919	-11'		Ū	哥所
CHEROKEE GP.	4370	-2928	-9'		-	
ERO. MISS. CHERT	4383	-2941	-19'		$\dot{\omega}$	8
				PROV. CO. CO. COM 4. 20. 40	37	COMM

Structural position compared to Okmar Oil #1 Kenney, S2 S2 SW 1-33-12w

ANALYSIS OF SHOWS:

Minor Show Zone(s):

Lansing 'A' Zone; 3766 - 3769', Not circulated or tested.

Limestone; Cream to buff, singular, recrystalline fossiliferous wakestone / grainstone. Scattered oolcastic pores and good interparticle and intercrystalline type porosity. Slight show of live oil with rare scattered gas bubbles. No odor. Spotted yellow fluorescence. Zone was well developed but unfortunately quite thin. It was tested in the offsetting wells and due to its thin character and low structural setting it was not tested in this well and not judged to be economically viable.

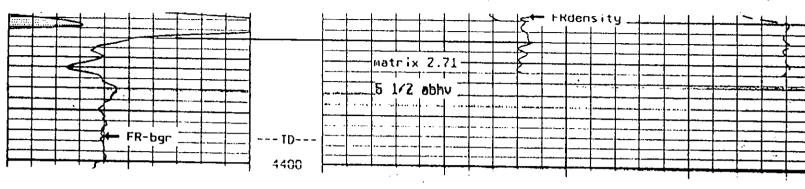
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Major Show Zone(s):

Erosional Mississippi Chert, 4383 - 4395 (RTD). Circulated and GONTY INSEMIT, IAL



Chert: Tan to white, mottled. Spicular to some weathered, occasional fresh sharp. Mostly dense appearing with some very fine intercrystalline and scattered fossilicast porosity. Weathered type porosity is good reservoir but only makes up small percentage of total chert. Dull yellow spotted fluorescence. Light odor. Slight show of gas bubbles.

Limestone: Pale green, singular, dense to sucrosic wackestone.

Limestone: Tan, singular, fossiliferous to recrystalline fossiliferous wackestone. Good vugular intergrainular type porosity. Nearly all porosity has heavy black dead oil in it. No fluorescence, good cut and strong cut fluorescence.

Though not identified specifically due to the quantify of slough from above, it appeared that there was interbedded shale both in the limestone and chert. The higher than normal gamma ray count on the open hole log seems to substantiate this.

Conclusions:

In reviewing the results of the #1-12 Prothe two assumptions can be made. One, the Telluric survey was a complete bust and totally failed to accurately predict the true structure and stratigraphy or the Tellurics were somewhat mis-interpeted due to their area of investigation. I firmly believe that the second scenario is correct and that moving the location to avoid the surface waterway may have compounded the error. Tellurics, by their design have a radius of investigation of nearly 400 feet at the depth of the Mississippi in this prospect. Also, tight, non-reservoir rock like that intercepted in this well give no "negative" Telluric signal as would a wet, permeable reservoir. Thus if Survey Station S-8 (that one nearest to the drillsite) only read "good gas" over the western portion of its radius of investigation (ROI) and the remaining portion was barren but not negative we would naturally give that station a "good reading" for the entire ROI. This is substantiated by readings of "moderate gas" surrounding S-8. The geological error was that the shallow saddle low inferred between the two ends of the trap was really a relatively narrow erosional ditch filled with shaley chert which the #1-12 Prothe intercepted. I believe that if the location had been moved west instead the well would have found the portion of the ROI which accurately read the "good gas" signal. However, due to the channel's dissecting the trap in half, the Prothe well even if it had found the productive portion of the reservoir may have recovered less gas than originally estimated.

Respectfully submitted,

Xploration Services, Inc.

Dean Pattisson
Consulting Geologist

NUC

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ALLIED CEMENTING COMPANY, INC.

ORIGINAL

P. O. BOX 31 RUSSELL, KANSAS 67665

Federal Tax I.D.# 48-0727860

TO:	Duke Drilling Co.	CONFIDENTIAL	INVOICE NO. <u>74793</u>
	P. O. Box 823		PURCHASE ORDER NO.
	Great Bend, KS 67530		LEASE NAME Prothe 1-12
	·	-APR€± g	97 DATE 3-30-97
SE	RVICE AND MATERIALS AS FOLLOWS:		

ていし \$603.90 Common 99sks @\$6.10 207.90 Pozmix 66 sks @\$3.15 JUN 2 0 28.50 Gel 3 sks @\$9.50 140.00 Chloride 5 sks @\$28.00 CONFIDENTIAL

980.30

173.25 Handling 165 sks @\$1.05 Mileage min. chg. 80.00 445.00 Surface Mi @\$2.85 pmp tkr chg (8) 22.80 45.00 l plug

766.05

\$1,746.35

(261.95) 1484.40

If Account CURRENT a Discount of \$ __261.95 will be Allowed ONLY if Paid Within 30 Days from

Date of Invoice.

All Prices Are Net, Payable 30 Days Following Date of Invoice. 14% Charged Thereafter.

RELEASED

Total

SEP 1 6 1998

FROM CONFIDENTIAL

TELEPHONE:

AREA CODE VIJ "483-2627 AREA CODE 913 483-3887

ALLIED CEMENTING COMPANY, INC.

P. O. BOX 31 RUSSELL, KANSAS 67665

Federal Tax I.D.# 48-0727860

ORIGINAL

74843

TO: .	Duke Drilling Co., Inc.		APR 1 8 1997	INVOICE NO	
10	P. O. Box 823		1 2 0 1337	PURCHASE ORDE	R NO
•	Great Bend, KS 67530	CUNEIDE	NITINI	LEASE NAME _	Prothe 1-12
	Great Bondy	- OOM IDL	NTIAL.	DATE	4-6-97
SE	RVICE AND MATERIALS AS FOLLOWS:				
	Common 81 sks @\$6.10 Pozmix 54 sks @\$3.15 Gel 7 sks @\$9.50	NUU	\$494.10 170.10 66.50		\$ 730.70
	Handling 135 sks @\$1.0 Mileage min. chg. Rotary Plug	5UN 2 0 CONFIDENTIAL	445.00		
	Mi @\$2.85 pmp trk chg l plug		22.80 23.00		712.55
		30	Tota	al	\$1,443.25
Discou will be Paid W	unt CURRENT a nt of \$216.48. Allowed ONLY if //ithin 30 Days from				
Date of	•	nk You!	V & Charged That	reafter	
	All Prices Are Net, Payable 30 Days Fol	lowing Date of Invoice. I	2 70 CHAIREO THE	CHICLI.	

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SEP 1 6 1998

FROM CONFIDENTIA

1997 JUNI 23 P 12: 36

FORM C-1 7/91 FORM, MUST BE TYPED

EFFECTIVE DATE: 7-16-97 DISTRICT # 1 SGA X YesNo	Kansas /5 - 007-22,533.00.00 FORM MUST BE SIGNED ALL BLANKS MUST BE FILLED
	Spot East
Expected Spud Date3997979	/.SENW Sec .12Twp33S, Rg12W X West
, , , , , , , , , , , , , , , , , , , ,	
OPERATOR: LICENSE #11532	990' feet from East / West Line of Section
Name:BISON PRODUCTIONCOMPANYAddress:9320 E. CENTRAL	IS SECTIONXXREGULAR IRREGULAR? (Note: Locate well on the Section Plat on Reverse Side)
City/State/Zip: WICHTA, KANSAS 67206. Contact Person: C.J. LETT.	County::::::::::::::::::::::::::::::::::::
Phone: 316-636-1801.	Field Name: RHODES.
CONTRACTOR: License #:5929	Is this a Prorated / Spaced Field?yes Xno Target Formation (s):MISSISSIPPI
Name:DUKE DRILLING COMPANY	Ground Surface Elevation: 1431 feet MSL
Well Drilled For: Well Class: Type Equipment:	Water well within one - quarter mile:yesno Public water supply well within one mile:yesyes
OilEnh Rec .X!nfieldX.Mud Rotary	Depth to bottom of fresh water: 100
OWWODisposal WildcatCable	Depth to bottom of usable water:
Seismic:# of HolesOther	Length of Surface Pipe Planned to be set:250
Other	Lenth of Conductor pipe required:0
Operator:	Formation at Total Depth:MISSISSIPPI Water Source for Drilling Operations:
Comp. Date:Old Total Depth	WeilFarm PondXother
Directional, Deviated or Horizontal wellbore?yesXno	DWR Permit #:
If yes, true vertical depth:	Will Cores Be Taken 7:yes _Xno
Exp. 8/11/97	AFFIDAVIT 200' Alt. 1 Req.
The undersigned hereby affirms that the drilling, completion and eventual	all plugging of this well will comply with K.S.A. 55-101, et. seq.
It is agreed that the following minimum requirements will be met. : = =	_ <u>_</u> <u></u>
 Notify the appropriate district office prior to spudding of w A copy of the approved notice of intent to drill shall be pos 	
3. The minimum amount of surface pipe as specified belows	shall be set by circulating cement to the tons in all cases surface from enablity or
D O N D O N	
LINED DOLLS.	
	50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
INIT. M. FLUID THEN done SIZE HOLE CONDUCTOR ELEVATIO	18 0 Ft. W/ 1 0 Ft. W/ 19 0 Ft. W/ 20 0 Ft. W/ 19 0 Ft. W/ 20 0 Ft
INIT. Z INIT. Z FLUID when done CONDUCTO CONDUCTO A IL A SX	Ft. W, Ft. W, Ft. W, Ft. W, Ft. W, Tt. W, Tt. W, Tole
INIT. FLUIR SIZE CONDO ELE	Ft. 60 Ft. 7290 Ft. 740 Ft.
11 11 12 13 13 14 15 15 15 15 15 15 15	E O Ft Se O Ft Se O Ft Se O Ft Se O Ft Sx MOUSE Sx (Trr. Well Sx (AM/PM) DA Sx SO (AM/PM) DA Sx Sx (AM/PM) DA
SEMOVE I SEM	MOUE WE WE ANTER D
N N N N N N N N N N N N N N N N N N N	Thr. Intr.
NHED - REMODELS NATION - DV 7	
ANNED ANNED BD15. APTION DV DV	
HEAL DO	a u x a y y y y y y y y y y y y y y y y y y
ATE	Arbuckle Flug Arbuckle Flug Anhydrite Base 1/2 Base Anyh. 1/2, 1/2 Flug Bottom Surface 40' Flug OLE CIRC/W WELL SX ICTAN TIME FING TIME FING TIME
RFACE TT ST T sect T se	in min 5 2 g as 1 min
SEA TIPE	Arbuckle Anhydrite 1/2 Base 1/2, 1/2 Bottom Su 40' Flug OLE CIRC/ 20 WELL ICIAN FING TIME FING TIME FING TIME
	Etc Etc Etc Etc CE CE
A S S S S S S S S S S S S S S S S S S S	Arbu Anhy 1/2 1/2 Bott OLE VEI OF C
FE GER T	Arbuckle Flu Anhydrite Be 1/2 Base Any 1/2, 1/2 Plu 1/2, 1/2 Plu An HOLE CIRC/W ATER WELL FECHNICIAN TYPE OF CEMENT TYPE OF CEMENT STARTING TIME
Pus SPU SPU RES ANH ANH TD	