

DEPARTURE LOG

Alaska OCS Region

Well Name: WILD WASEL #1	Lease: OCS-Y 1597 #1	Operator: ARCO
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Date	Departure	Verbal or Written?	Written Follow-up
① 11/6/93	Reduce # of anchors deployed (from 12 to 8)	VERBAL	YES; 11/8/93 sundry Notice
② 11/6/93	offload oil spill response equipment from supplier to demobilization barge prior to P&A	VERBAL	YES; 11/8/93 sundry Notice
③	offload barite (dry) from Kulluk to barge	VERBAL	YES; 11/8/93 sundry notice

DRILLING OPERATIONS DEPARTURE FORM

Alaska OCS Region

Well Name: WILD WEASEL^{#1}	Lease: OCS-Y 1597^{#1}	Block 760
Area: CAMDEN BAY BEAUFORT SEA	Operator: ARCO	Drill Unit: KULLUK


<u>Date</u>	<u>Departure</u>	<u>Requested by</u>	<u>Verbal/Written</u>
① 11/6/93	REDUCE [#] OF ANCHORS DEPLOYED FROM 12 TO 8.	MIKE WINFREE (ARCO)	VERBAL
② 11/6/93	OFFLOAD OIL SPILL EQUIPMENT FROM SUPPLIER TO DEMOB. BARGE PRIOR TO P&A.	MIKE WINFREE (ARCO)	VERBAL
③ 11/6/93	OFFLOAD BARGE (DRY) FROM KULLUK.	MIKE WINFREE (ARCO)	VERBAL

Details of Operation to be Performed (include sketch if appropriate)

ARCO REQUESTED DEPARTURES (NOTED ABOVE) ON 11/6 TO ENABLE
QUICKER DEMOBILIZATION OF THE RIG. WELL CURRENTLY BEING
LOGGED. PLUGGING OPERATIONS BEGAN 11/8/93. BARGE RELEASED
FROM KULLUK LOCATION @ 1630 HRS 11/8/93.

Request Approved by:

Brian Schoof 11/6/93


 District Supervisor
 Drilling Engineer 11/11/93
 Chief, PET
 Other

Instructions

1. All departures will be logged once approved; multiple departures can be logged on the same form.
2. Include a brief description of each departure or change requested.
3. When approved, departures will be provided to the RSFO, the after hours duty officer, and the inspection staff.
4. Departures granted in the field will be transmitted to the District Supervisor. A copy will be attached to the PINC list.

SUNDRY NOTICES AND REPORTS ON WELLS

1. FIELD NAME Wildcat			2. MMS LEASE, UNIT OR COMM. NO. (6) Y 1597 0		3. MMS OPERATOR NUMBER (5) 0635														
4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1		5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011		6. TYPE WELL (1) NA E		7. CORRECTED ELEVATION (5) 65' RKB-MSL													
8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360				9. CURRENT WELL DEPTH (5) ✓ MD 2860 TVD 3060		10. CORRECTED WATER DEPTH (5) 87'													
				LEAVE BLANK															
11. CORRECTED LOCATION OF WELL (12) Surface: 2801' FSL and 3134' FEL of Block 760 Production zone: NA Total depth: 3860' RKB				12. OPERATING AREA CODE (2) FI		13. BLOCK NUMBER (6) 0760													
				14. MAP OR OFFICIAL PROTRACTION DIAGRAM NUMBER (7) NR 6-4, Flaxman Island															
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME OCS Y 1597				16. RIG/PLATFORM NAME Canmar - Kulluk		17. RIG TYPE (2) SS													
18. WELL STATUS, e.g., shut-in, drilling, etc. Drilling		19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) 13-3/8", 68 lb/ft, L-80, BTC set at 3829'			20. APPROXIMATE START DATE (6) YYMMDD 93 10 13														
21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA																			
22. CHECK APPROPRIATE ACTIVITY:		<table border="0" style="width:100%;"> <tr> <td>Fracture/acidize <input type="checkbox"/></td> <td>Artificial Lift <input type="checkbox"/></td> <td>Other <input checked="" type="checkbox"/></td> </tr> <tr> <td>Pull or alter casing <input type="checkbox"/></td> <td>Repair well <input type="checkbox"/></td> <td>Perforate <input type="checkbox"/></td> </tr> <tr> <td>Sidetrack <input type="checkbox"/></td> <td>Deepen <input type="checkbox"/></td> <td>Plug back <input type="checkbox"/></td> </tr> <tr> <td>Reenter to complete <input type="checkbox"/>*</td> <td>Multiple complete <input type="checkbox"/>*</td> <td>Recomplete <input type="checkbox"/>*</td> </tr> </table>						Fracture/acidize <input type="checkbox"/>	Artificial Lift <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Pull or alter casing <input type="checkbox"/>	Repair well <input type="checkbox"/>	Perforate <input type="checkbox"/>	Sidetrack <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug back <input type="checkbox"/>	Reenter to complete <input type="checkbox"/> *	Multiple complete <input type="checkbox"/> *	Recomplete <input type="checkbox"/> *
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Data correction <input type="checkbox"/> Change plans <input type="checkbox"/> Request approval <input type="checkbox"/> Subsequent report <input checked="" type="checkbox"/>		Note: Submit a separate Well (Re) Completion Report and a subsequent report of operations on this form for each completion. Alternatively, submit a Well (Re) Completion Report for each completion with a narrative as in item 23 of this form.																	
23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details in this space and on the reverse, and/or on an attachment, and give pertinent dates, including estimated date for starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.																			
<p>1 13-3/8" Surface Casing Installed 10/23 /93 to 3829'. CIP @ 17:06 hrs 10/23/93. Casing was cemented with 1160sx (353 bbls) Class G w/2%gel and 2% CaCl2 at 13.5 ppg; and 365 sx (76 bbl) Class G w/2% CaCl2 @ 15.8 ppg. Subsea launched wiper plugs were utilized. 13-3/8" casing detail attached.</p> <p>2 A formation Leak off Test was performed after drilling 10' of new formation below the 13-3/8" shoe. A 15.5 ppg EMW test was obtained. Pressure vs volume chart is attached.</p>																			

RECEIVED
OCS DISTRICT OFFICE

OCT 28 1993

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)

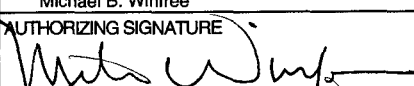
RECEIVED
DPS DISTRICT OFFICE

OCT 28 1993

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKASUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

WARNING: PUBLIC LAW 97-451 provides civil and criminal penalties for false or inaccurate reporting. Failure to report as required under the terms of the lease, permit, or contract may result in suspension of operations or other enforcement actions.

CONTACT NAME (First, MI, Last)	PHONE NUMBER (10)	EXTENSION NUMBER (4)
Tim Billingsley	(907) 265-6575	
AUTHORIZING NAME (First, MI, Last)	TITLE	
Michael B. Winfree	New Ventures Area Drilling Engineer	
AUTHORIZING SIGNATURE	DATE YYMMDD (6)	
	93 10 25	

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

ARE ATTACHED ☐NONE ☐DATE (6)
YYMMDD☒ APPROVED BY:☐ ACCEPTED BY:

TITLE

District Supervisor 93/10/26

PAPERWORK REDUCTION ACT STATEMENT

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that: This information is being collected to obtain knowledge of the equipment and procedures to be used during well-completion, workover, and production operations. This information will be used by the District Supervisor to evaluate and approve or disapprove the adequacy of the equipment and procedures to safely perform the proposed operations. Response to this request is mandatory (43 U.S.C. 1334).

Public reporting burden for this form is estimated to average 1/2 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 631, Minerals Management Service, 12203 Sunrise Valley Drive, Reston, VA 22091; and Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

OCS-Y-1597 #1
13-3/8" LEAK-OFF TEST

RECEIVED
OCS DISTRICT OFFICE

OCT 28 1993

DATE: 10/24/93

MUD WEIGHT = 9.8 PPG, TVD = 3870'

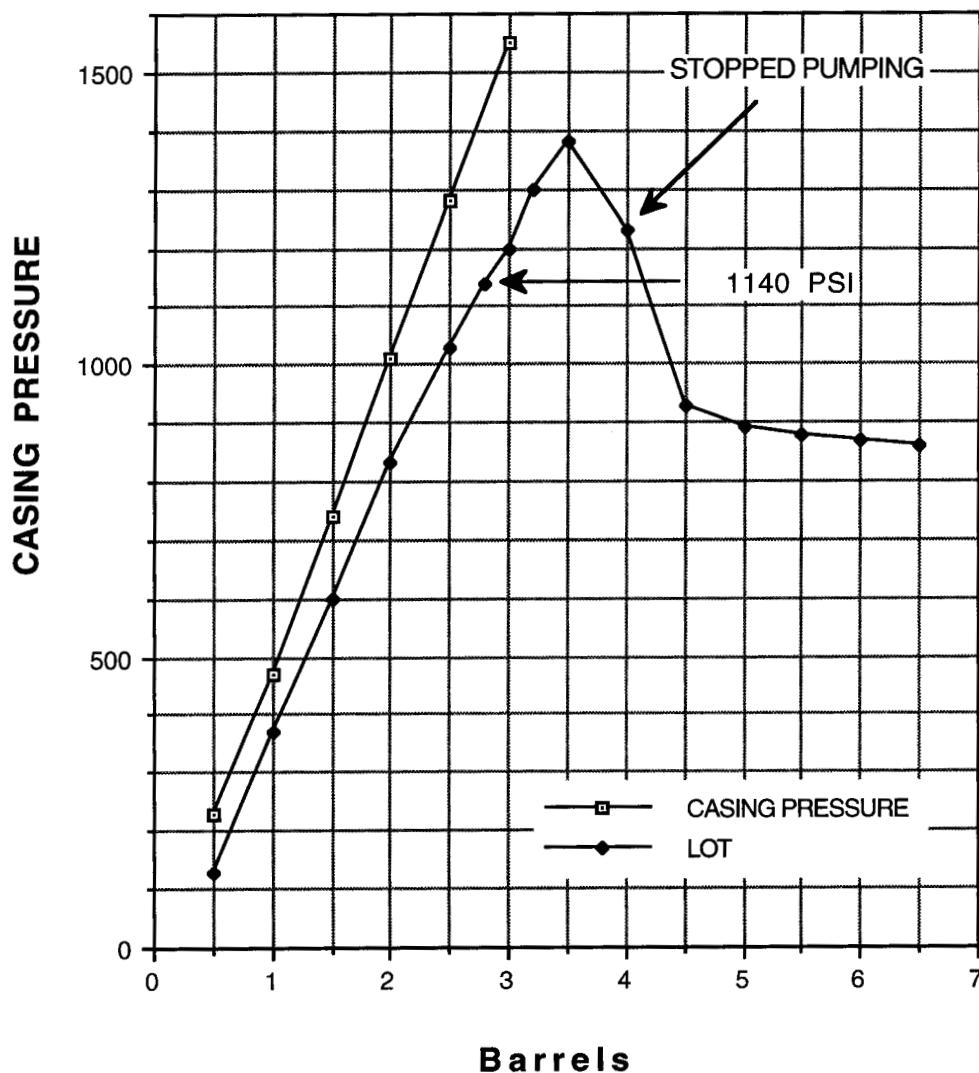
HYDROSTATIC = $.052 \times 3870' \times 9.8 = 1972$ PSI

LEAK-OFF PRESSURE FROM GRAPH @ 1140 PSI WITH 2.8 BBLS PUMPED

LOT EMW = $(1972 \text{ PSI} + 1140 \text{ PSI}) / (3870' \times .052) = 15.5$ PPG

BOTH CASING AND LOT PRESSURES WERE OBTAINED @ 1/2 BPM.

HELD PRESSURE FOR 5 MINS. FORMATION BLED OFF FROM 1230 TO 850 PSI.



ARCO Alaska, Inc.

Cementing Details 1993

Well#:	Y-1597 #1	Field:	Wild Cat	Date:	10/23/93
Casing Size 13-3/8"	Hole Diameter 17-1/2"	Hole Angle 0	Shoe Depth 3829'	Float Depth 3746'	MAINTENANCE SERVICE ANCHORAGE, ALASKA
Centralizers	State type used, intervals covered and spacing				
	None				
Mud	Weight 9.6	YP(prior cond) 39	YP(after cond) 39	PV(prior cond) 29	PV(after cond) 29
	Gels before 10-Jun	Gels after 10-Jun	Total Volume Circulated 700 bbls		
Spacer	Type BRINE	Volume 90 BBLS		Weight 8.9 PPG	
Lead Cement	Type G	Mix wtr temp 70°	No. of sacks 1160	Weight 13.5 PPG	Yield 1.71
	Additives 2% GEL, 2% CaCl ₂ , .05 g/sx defoamer				
Tail Cement	Type G	Mix water temp 70°	No. of sacks 365	Weight 15.8 PPG	Yield 1.18
	Additives 1.5% CaCl ₂ , .05 g/sx defoamer				
Displacement	Rate(before tail at shoe) 4 - 5 BPM		Rate(tail around shoe) 4 - 5 BPM		Str. Wt. Up
	Reciprocation length N/A - latched in WH		Reciprocation speed N/A - latched in WH		Str. Wt. Down 200 Klbs
	Theoretical Displacement 539 bbls		Actual Displacement 539 BBLS		Str. Wt. in mud N/A (Latched)
Calculated top of cement 600' RKB		CIP 17:06 10/23	Bumped plug 2500 psi	Floats held OK	
Remarks: Include whether full returns were obtained, reciprocation throughout operation and any other pertinent information.					
No trouble running casing except for some drag at 1370' and 3650' but fell through without using TAM packer.					
Full returns throughout job. Had cement/brine contaminated 9.4 ppg mud at end of displacement					
Cement Company Dowell		Rig Contractor CANMAR CDU KULLUK		Signature Campbell/Schultz/Billingsley	

[illegible]

SUNDRY NOTICES AND REPORTS ON WELLS

1. FIELD NAME Wildcat			2. MMS LEASE, UNIT OR COMM. NO. (6) Y 1597 0		3. MMS OPERATOR NUMBER (5) 0635													
4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1		5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011		6. TYPE WELL (1) NA	7. CORRECTED ELEVATION (5) 65' RKB-MSL													
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				14. MAP OR OFFICIAL PROTRACTION DIAGRAM NUMBER (7) NR 6-4, Flaxman Island														
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME Kuvlum			16. RIG/PLATFORM NAME Canmar - Kulluk		17. RIG TYPE (2) SS													
18. WELL STATUS, e.g., shut-in, drilling, etc. Drilling		19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) 13-3/8", 68 lb/ft, L-80, BTC set at 3829'			20. APPROXIMATE START DATE (6) YYMMDD 93 10 13													
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OCT DISTRICT OFFICE

OCT 28 1993

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

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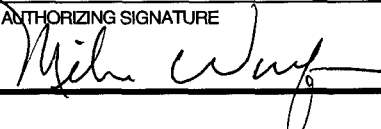
REG. NO. _____
OCS DISTRICT OFFICE

OCT 28 1993

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKASUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

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CONTACT NAME (First, MI, Last)	PHONE NUMBER (10)	EXTENSION NUMBER (4)
Tim Billingsley	(907) 265-6575	
AUTHORIZING NAME (First, MI, Last)	TITLE	
Michael B. Wintree	New Ventures Area Drilling Engineer	
AUTHORIZING SIGNATURE	DATE YYMMDD (6)	
	93 10 25	

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

ARE ATTACHED ☐NONE ☐DATE (6)
YYMMDD☒ APPROVED BY:☐ ACCEPTED BY:

TITLE

District Supervisor 93/10/26

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OCS-Y-1597 #1
13-3/8" LEAK-OFF TEST

OCS DIST. NO. 1597

OCT 28 1993

DATE: 10/24/93

MUD WEIGHT = 9.8 PPG, TVD = 3870'

HYDROSTATIC = $.052 \times 3870' \times 9.8 = 1972$ PSI

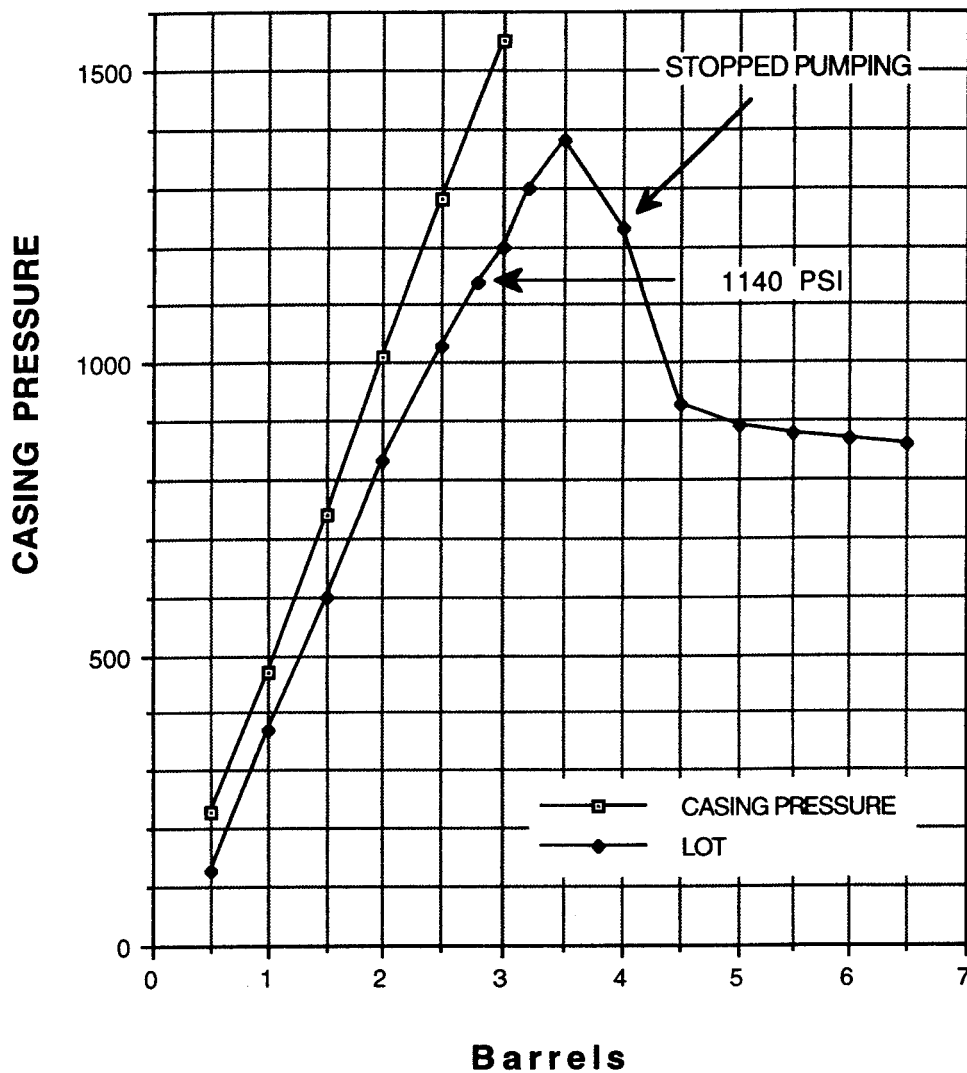
LEAK-OFF PRESSURE FROM GRAPH @ 1140 PSI WITH 2.8 BBLS PUMPED

LOT EMW = $(1972 \text{ PSI} + 1140 \text{ PSI}) / (3870' \times .052) = 15.5$ PPG

BOTH CASING AND LOT PRESSURES WERE OBTAINED @ 1/2 BPM.

HELD PRESSURE FOR 5 MINS. FORMATION BLED OFF FROM 1230 TO 850 PSI.

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA



OCT 26 1992

ARCO Alaska, Inc.
Cementing Details

Well#:	Y-1597 #1	Field:	Wild Cat	Date:	10/23/93
Casing Size 13-3/8"	Hole Diameter 17-1/2"	Hole Angle 0	Shoe Depth 3829'	Float Depth 3746'	% washout 0
Centralizers	State type used, intervals covered and spacing				
	None				
Mud	Weight 9.6	YP(prior cond) 39	YP(after cond) 39	PV(prior cond) 29	PV(after cond) 29
	Gels before 10-Jun	Gels after 10-Jun	Total Volume Circulated 700 bbls		
Spacer	Type BRINE		Volume 90 BBLS		Weight 8.9 PPG
Lead Cement	Type G	Mix wtr temp 70°	No. of sacks 1160	Weight 13.5 PPG	Yield 1.71
	Additives 2% GEL, 2% CaCl ₂ , .05 g/sx defoamer				
Tail Cement	Type G	Mix water temp 70°	No. of sacks 365	Weight 15.8 PPG	Yield 1.18
	Additives 1.5% CaCl ₂ , .05 g/sx defoamer				
Displacement	Rate(before tail at shoe) 4 - 5 BPM		Rate(tail around shoe) 4 - 5 BPM		Str. Wt. Up
	Reciprocation length N/A - latched in WH		Reciprocation speed N/A - latched in WH		Str. Wt. Down 200 Klbs
	Theoretical Displacement 539 bbls		Actual Displacement 539 BBLS		Str. Wt. in mud N/A (Latched)
Calculated top of cement 600' RKB		CIP 17:06 10/23	Bumped plug 2500 psi	Floats held OK	
Remarks: Include whether full returns were obtained, reciprocation throughout operation and any other pertinent information.					
No trouble running casing except for some drag at 1370' and 3650' but fell through without using TAM packer.					
Full returns throughout job. Had cement/brine contaminated 9.4 ppg mud at end of displacement					
Cement Company Dowell		Rig Contractor CANMAR CDU KULLUK		Signature Campbell/Schultz/Billingsley	

[illegible]



IN REPLY REFER TO:

United States Department of the Interior

MINERALS MANAGEMENT SERVICE

Alaska Outer Continental Shelf Region
949 E. 36th Avenue, Room 603
Anchorage, Alaska 99508-4302



OCT 26 1993

Mr. M. B. Winfree
ARCO Alaska, Inc.
P.O. Box 100360
Anchorage, Alaska 99510-0360

Dear Mr. Winfree:

Enclosed is the approved copy of your Sundry Notice and Reports on Wells for OCS-Y 1597 #1 (Enclosure) for the 3-1/2 inch rams to be used in the blowout preventor stack.

Please feel free to contact me at (907) 271-6066, if you have any questions.

Sincerely,

Orig. Sgnd. By Brian Schoof
Brian F. Schoof
Supervisor, District Office
Field Operations

Enclosure

bcc: \OCS-Y 1597 #1 - 6A Area/District
Chronos Area/District/CC/RD
BSchoof:10-26-93:nll:arco_su3



IN REPLY REFER TO:

United States Department of the Interior

MINERALS MANAGEMENT SERVICE

Alaska Outer Continental Shelf Region

949 E. 36th Avenue, Room 603

Anchorage, Alaska 99508-4302

TAKE
PRIDE IN
AMERICA

OCT 26 1993

Mr. M. B. Winfree
ARCO Alaska, Inc.
P.O. Box 100360
Anchorage, Alaska 99510-0360

Dear Mr. Winfree:

Enclosed is the approved copy of your Sundry Notice and Reports on Wells
(3 Enclosures) for the following:

- 1) Sundry Notice #2, OCS-Y 1597 #1, Block 760
- 2) Sundry Notice #4, OCS-Y 1597 #1, Block 760
- 3) Report of Well Abandonment, OCS-Y 0865 #1, Kuvlum #2

Please feel free to contact me at (907) 271-6066, if you have any questions.

Sincerely,

Orig. Sgn'd. By Brian Schoof

Brian F. Schoof
Supervisor, District Office
Field Operations

3 Enclosures

DCS-Y 0865 #1 - 6A AREA/DISTRICT
bcc: OCS-Y 1597 #1 - 6A Area/District
Chron's Area/District/CC/RD
BSchoof:10-26-93:nll:arco_su5



IN REPLY REFER TO:

United States Department of the Interior

MINERALS MANAGEMENT SERVICE

Alaska Outer Continental Shelf Region

949 E. 36th Avenue, Room 603

Anchorage, Alaska 99508-4302



OCT 25 1993

Mr. M. B. Winfree
ARCO Alaska, Inc.
P.O. Box 100360
Anchorage, Alaska 99510-0360

Dear Mr. Winfree:

Enclosed is the approved copy of the Sundry Notice (MMS-331) for OCS-Y 1597 #1 (Enclosure 1) changing the surface hole logging.

Please feel free to contact me at (907) 271-6066, if you have any questions.

Sincerely,

Brian F. Schoof
Supervisor, District Office
Field Operations

Enclosure

bcc: OCS-Y 1597 #1 6-A DISTRICT
Chronos Area/District/CC/RD
BSchoof:10-25-93:nll:arco_su4

DRILLING OPERATIONS DEPARTURE FORM

Alaska OCS Region

Well Name: WILD WEASEL #1	Lease: OCS-Y 1597	Block 760
Area: BEAUFORT SEA CAMDEN BAY	Operator: ARCO	Drill Unit: KULLUK

<u>Date</u>	<u>Departure</u>	<u>Requested by</u>	<u>Verbal/Written</u>
10/23/93	WEEKLY BOPE TEST	BRUCE CAMPBELL (ARCO)	VERBAL; NOTED IN 10/24/93 DAILY REPORT

Details of Operation to be Performed (include sketch if appropriate)

ARCO REQUESTED AND WAS GRANTED DEPARTURE FROM COMPLETE WEEKLY BOPE TEST. ARCO TESTED SUBSURFACE BOPE ONLY ON 10/23/93. PREVIOUS BOPE TEST WAS CONDUCTED ON 10/19/93 WITH ALL COMPONENTS TESTED AS REQUIRED.

Request Approved by:

RANDY HOWELL
MMS INSPECTOR ON
KULLUK

DB District Supervisor
JBR Drilling Engineer 10/25/93
 Chief, PET
See 10/24 Other

Instructions

1. All departures will be logged once approved; multiple departures can be logged on the same form.
2. Include a brief description of each departure or change requested.
3. When approved, departures will be provided to the RSFO, the after hours duty officer, and the inspection staff.
4. Departures granted in the field will be transmitted to the District Supervisor. A copy will be attached to the PINC list.

ARCO Alaska, Inc.
Post Office Box 100360
Anchorage, Alaska 99510-0360
Telephone 907-276-1215



October 22, 1993

United States Department of the Interior
Minerals Management Service
Alaska Outer Continental Shelf Region
949 East 36th Avenue, Suite 503
Anchorage, Alaska 99508-4302
(907) 271-6066 (907) 563-2857 (fax)

Attention: Mr. Brian Schoof
District Office Supervisor

Subject: Sundry Notice #4, Form MMS-331
OCS-Y-1597 #1, Block 760
Beaufort Sea, Alaska

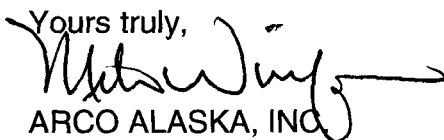
Dear Mr. Schoof:

Attached for your records is a Sundry Notice (Form MMS-331) for the following subject regarding the above referenced well:

1. A change from the approved APD is requested to eliminate open hole wireline logs in the surface hole interval from $\pm 4000'$ to $\pm 1000'$. The APD stated open hole wireline logs would be run in this interval if time and hole conditions were appropriate. There are no zones of interest in this interval and 1-3 days can be saved by eliminating these logs. MWD logs (gamma ray and resistivity) have been obtained in this interval and are adequate for our evaluation.

This notice is sent in triplicate with one public information copy. Thank you for maintaining the confidential nature of this information.

Any questions pertaining to this Sundry Notice should be directed to Fred Johnson at 265-1492, or to me at 263-4603.

Yours truly,

ARCO ALASKA, INC.

M.B. Winfree
Area Drilling Engineer, New Ventures Drilling

enclosure

cc: OCS-Y-1597 #1 Well File
F. C. Johnson
T.A. Billingsley

File W1
ATO-1404
ATO-1446

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

OCS DISTRICT

OCT 26 1993

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)

SUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

WARNING: PUBLIC LAW 97-451 provides civil and criminal penalties for false or inaccurate reporting. Failure to report as required under the terms of the lease, permit, or contract may result in suspension of operations or other enforcement actions.

CONTACT NAME (First, MI, Last)

Tim Billingsley

PHONE NUMBER (10)

(907) 265-6575

EXTENSION NUMBER (4)

AUTHORIZING NAME (First, MI, Last)

Michael B. Winfree

TITLE

New Ventures Area Drilling Engineer

AUTHORIZING SIGNATURE

DATE YYMMDD (6)

93 10 22

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

ARE ATTACHED ☒NONE ☐☒ APPROVED BY:☐ ACCEPTED BY:

TITLE

DATE (6)
YYMMDD

93 10 25

PAPERWORK REDUCTION ACT STATEMENT

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that: This information is being collected to obtain knowledge of the equipment and procedures to be used during well-completion, workover, and production operations. This information will be used by the District Supervisor to evaluate and approve or disapprove the adequacy of the equipment and procedures to safely perform the proposed operations. Response to this request is mandatory (43 U.S.C. 1334).

Public reporting burden for this form is estimated to average 1/2 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 631, Minerals Management Service, 12203 Sunrise Valley Drive, Reston, VA 22091; and Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

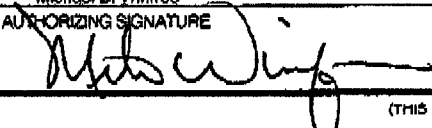
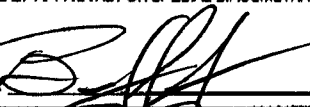

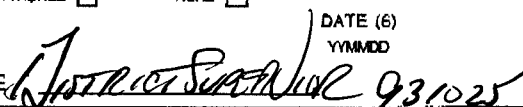
MMS U.S. Department of the Interior
Minerals Management Service

OCT 22 1993

CMS APPROVAL NO. 1010-0045
EXPIRES: OCTOBER 31, 1991
SUBMIT: Original,
two copies, and one public
information copy.

SUNDRY NOTICES AND REPORTS ON WELLS MINERALS MANAGEMENT SERVICE

1. FIELD NAME Wildcat		2. MMS LEASE, UNIT OR COMMUNITIZATION NAME Y 1667 0		3. MMS OPERATOR NUMBER (5) 0635													
4. OPERATOR WELL NUMBER (5) OCS-Y-1587 #1		5. API NUMBER (10) or (12) STATE (9) COUNTY (3) WELL CODE (5) 55 171 00011		6. TYPE WELL (1) E													
8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360		9. CURRENT WELL DEPTH (5) MD 3960' TVD 3960' LEAVE BLANK		7. CORRECTED ELEVATION (5) 66' RKB-MSL est													
11. CORRECTED LOCATION OF WELL (12) Surface: 2801' FSL and 3134' FEL of Block 760 planned Production zone: NA Total depth: NA		12. OPERATING AREA CODE (2) FJ		13. BLOCK NUMBER (8) 0780													
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME Kuvlum		16. RIG/PLATFORM NAME 5884DRI - Kuvlum		17. RIG TYPE (2) SS													
18. WELL STATUS. e.g., shut-in, drilling, etc. Circulating at 3860'		19. LAST CASING STRING: size, lft, grade, and setting depth (MD) 20", 133 lb/ft, X-56 set at 1000'		20. APPROXIMATE START DATE (6) YYMMDD 90 10 15													
21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA																	
22. CHECK APPROPRIATE ACTIVITY:		<table border="0"> <tr> <td>Fracture/acidize <input type="checkbox"/></td> <td>Artificial Lift <input type="checkbox"/></td> <td>Other <input checked="" type="checkbox"/></td> </tr> <tr> <td>Pull or alter casing <input type="checkbox"/></td> <td>Repair well <input type="checkbox"/></td> <td>Perforate <input type="checkbox"/></td> </tr> <tr> <td>Sidetrack <input type="checkbox"/></td> <td>Deepen <input type="checkbox"/></td> <td>Plug back <input type="checkbox"/></td> </tr> <tr> <td>Reenter to complete <input type="checkbox"/></td> <td>Multiple complete <input type="checkbox"/></td> <td>Recomplete <input type="checkbox"/></td> </tr> </table>				Fracture/acidize <input type="checkbox"/>	Artificial Lift <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Pull or alter casing <input type="checkbox"/>	Repair well <input type="checkbox"/>	Perforate <input type="checkbox"/>	Sidetrack <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug back <input type="checkbox"/>	Reenter to complete <input type="checkbox"/>	Multiple complete <input type="checkbox"/>	Recomplete <input type="checkbox"/>
Fracture/acidize <input type="checkbox"/>	Artificial Lift <input type="checkbox"/>	Other <input checked="" type="checkbox"/>															
Pull or alter casing <input type="checkbox"/>	Repair well <input type="checkbox"/>	Perforate <input type="checkbox"/>															
Sidetrack <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug back <input type="checkbox"/>															
Reenter to complete <input type="checkbox"/>	Multiple complete <input type="checkbox"/>	Recomplete <input type="checkbox"/>															
<p>Date correction <input type="checkbox"/></p> <p>Change plans <input checked="" type="checkbox"/></p> <p>Request approval <input checked="" type="checkbox"/></p> <p>Subsequent report <input type="checkbox"/></p> <p>Note: Submit a separate Well (Re) Completion Report and a subsequent report of operations on this form for each completion. Alternatively, submit a Well (Re) Completion Report for each completion with a narrative as in item 23 of this form.</p>																	
<p>23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details in this space and on the reverse, and/or on an attachment, and give pertinent dates, including estimated date for starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)</p> <p>1. Waiver is requested to eliminate the open hole wireline logs from the surface hole interval ($\pm 4000'$ to $\pm 1000'$).</p> <p>Open hole wireline logs are being eliminated because there are no zones of interest and 1-3 days of rig time can be saved.</p> <p>MWD logs have been obtained in this interval (gamma ray and resistivity)</p>																	

FORM MMS-331	SUNDRY NOTICES AND REPORTS ON WELLS	Page 2
23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)		
SUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED <input type="checkbox"/> SURFACE CONTROLLED <input type="checkbox"/> SET AT DEPTH OF _____		
MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____		
WARNING: PUBLIC LAW 97-451 provides civil and criminal penalties for false or inaccurate reporting. Failure to report as required under the terms of the lease, permit, or contract may result in suspension of operations or other enforcement actions.		
CONTACT NAME (First, MI, Last)	PHONE NUMBER (10)	EXTENSION NUMBER (4)
Tim Billingsley	(907) 265-6575	
AUTHORIZING NAME (First, MI, Last)	TITLE	
Michael B. Winfree	New Ventures Area Drilling Engineer	
AUTHORIZING SIGNATURE	DATE YYMMDD (6)	
	93 10 22	
(THIS SPACE IS FOR FEDERAL OFFICE USE)		
CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES: ARE ATTACHED <input type="checkbox"/> NONE <input type="checkbox"/>		
<input checked="" type="checkbox"/> APPROVED BY: 	DATE (6) YYMMDD	
<input type="checkbox"/> ACCEPTED BY: 	TITLE:  931025	
PAPERWORK REDUCTION ACT STATEMENT		
<p>The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that: This information is being collected to obtain knowledge of the equipment and procedures to be used during well-completion, workover, and production operations. This information will be used by the District Supervisor to evaluate and approve or disapprove the adequacy of the equipment and procedures to safely perform the proposed operations. Response to this request is mandatory (43 U.S.C. 1334).</p> <p>Public reporting burden for this form is estimated to average 1/2 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 631, Minerals Management Service, 12203 Sunrise Valley Drive, Reston, VA 22091; and Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.</p>		

DRILLING OPERATIONS DEPARTURE FORM

Alaska OCS Region

Well Name: WILD WEASEL ²¹	Lease: OCS-Y 1597	Block 760
Area: CAMDEN BAY BEAUFORT SEA	Operator: ARCO	Drill Unit: KULLUK

<u>Date</u>	<u>Departure</u>	<u>Requested by</u>	<u>Verbal/Written</u>
10/21/93	NO LOGS (WIREFRAME) FOR 13 ³ / ₈ " HOLE SECTION	FRED JOHNSON (ARCO)	VERBAL




Details of Operation to be Performed (include sketch if appropriate)

NO OPEN HOLE LOGS WILL BE RUN PRIOR TO SETTING 13³/₈"
CASING. MWD LOGS (GR & RESISTIVITY) WILL BE PART OF
DRILLING PACKAGE. WRITTEN FOLLOW-UP VIA SUNDAY NOTICE
FORTHCOMING.

- SUNDAY NOTICE FILED 10/25/93 VIA FAX

Request Approved by:

BREAN SCHOOF


District Supervisor
 10/21/93 Drilling Engineer
Chief, PET
 10/21/93 Other

Instructions

1. All departures will be logged once approved; multiple departures can be logged on the same form.
2. Include a brief description of each departure or change requested.
3. When approved, departures will be provided to the RSFO, the after hours duty officer, and the inspection staff.
4. Departures granted in the field will be transmitted to the District Supervisor. A copy will be attached to the PINC list.

ARCO Alaska, Inc.
Post Office Box 100360
Anchorage, Alaska 99510-0360
Telephone 907-276-1215



October 20, 1993

United States Department of the Interior
Minerals Management Service
Alaska Outer Continental Shelf Region
949 East 36th Avenue, Suite 503
Anchorage, Alaska 99508-4302
(907) 271-6066 (907) 563-2857 (fax)

RECEIVED
OCS DISTRICT OFFICE

Attention: Mr. Brian Schoof
District Office Supervisor

OCT 26 1993

Subject: Sundry Notice #2, Form MMS-331
OCS-Y-1597 # , Block 760
Beaufort Sea, Alaska

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

Dear Mr. Schoof:

Attached for your records is a Sundry Notice (Form MMS-331) for the following subjects regarding the above referenced well:

1. Actual Water Depth
2. Surveyed Well Location Plat
3. Well Spud Date and Time
4. 30" Structural Casing Installation
5. 20" Conductor Casing Installation
6. 20" Formation Leakoff Test Results
7. Glory Hole Schematic

This notice is sent in duplicate with one public information copy. Thank you for maintaining the confidential nature of this information.

Any questions pertaining to this Sundry Notice should be directed to Tim Billingsley at 265-6575, or to me at 263-4603.

Yours truly,


ARCO ALASKA, INC.

M.B. Winfree
Area Drilling Engineer, New Ventures Drilling

enclosure

cc: OCS-Y-1597 #1
F. C. Johnson
T.A. Billingsley

File W1
ATO-1404
ATO-1446

SUNDRY NOTICES AND REPORTS ON WELLS

1. FIELD NAME Wildcat		2. MMS LEASE, UNIT OR COMM. NO. (6) Y 1597 0		3. MMS OPERATOR NUMBER (5) 0635													
4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1	5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011	SIDE TRACK(2) NA	COMPLETION CODE (3) E	6. TYPE WELL (1) E	7. CORRECTED ELEVATION (5) 65' RKB-MSL												
8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360		9. CURRENT WELL DEPTH (5) MD 1000' TVD 1000' LEAVE BLANK		10. CORRECTED WATER DEPTH (5) 87'													
11. CORRECTED LOCATION OF WELL (12) Surface: 2801' FSL and 3134' FEL (12,706" FWL) of Block 760 Production zone: NA Total depth: NA		12. OPERATING AREA CODE (2) FI		13. BLOCK NUMBER (6) 0760													
		14. MAP OR OFFICIAL PROTRACTION DIAGRAM NUMBER (7) NR 6-4, Flaxman Island															
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME Kuvlum		16. RIG/PLATFORM NAME BeauDril - Kulluk		17. RIG TYPE (2) SS													
18. WELL STATUS, e.g., shut-in, drilling, etc. Drilling	19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) 20", 133 lb/ft, X-56 @ 1000'		20. APPROXIMATE START DATE (6) YYMMDD 93 10 13														
21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA																	
22. CHECK APPROPRIATE ACTIVITY:		<table style="width:100%; border: none;"> <tr> <td style="width:33%;">Fracture/acidize <input type="checkbox"/></td> <td style="width:33%;">Artificial Lift <input type="checkbox"/></td> <td style="width:33%;">Other <input checked="" type="checkbox"/></td> </tr> <tr> <td>Pull or alter casing <input type="checkbox"/></td> <td>Repair well <input type="checkbox"/></td> <td>Perforate <input type="checkbox"/></td> </tr> <tr> <td>Sidetrack <input type="checkbox"/></td> <td>Deepen <input type="checkbox"/></td> <td>Plug back <input type="checkbox"/></td> </tr> <tr> <td>Reenter to complete <input type="checkbox"/>*</td> <td>Multiple complete <input type="checkbox"/>*</td> <td>Recomplete <input type="checkbox"/>*</td> </tr> </table>				Fracture/acidize <input type="checkbox"/>	Artificial Lift <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Pull or alter casing <input type="checkbox"/>	Repair well <input type="checkbox"/>	Perforate <input type="checkbox"/>	Sidetrack <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug back <input type="checkbox"/>	Reenter to complete <input type="checkbox"/> *	Multiple complete <input type="checkbox"/> *	Recomplete <input type="checkbox"/> *
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Sidetrack <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug back <input type="checkbox"/>															
Reenter to complete <input type="checkbox"/> *	Multiple complete <input type="checkbox"/> *	Recomplete <input type="checkbox"/> *															
Data correction <input type="checkbox"/> Change plans <input type="checkbox"/> Request approval <input type="checkbox"/> Subsequent report <input checked="" type="checkbox"/>		Note: Submit a separate Well (Re) Completion Report and a subsequent report of operations on this form for each completion. Alternatively, submit a Well (Re) Completion Report for each completion with a narrative as in item 23 of this form.															
23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details in this space and on the reverse, and/or on an attachment, and give pertinent dates, including estimated date for starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)																	
1 Actual water depth for OCS-Y-1597 #1 = 87', RKB TO ML = 152' 2 Actual location for OCS-Y-Q597 #1 2801' FSL and 3134' FEL (12,706" FWL) of Block 760 3 Well was spudded @ 09:00 hrs 10/13/93. 4 30" structural casing was installation was completed 00:30 hrs 10/14/93. 30" casing detail attached. 5 20" conductor casing installed 10/16-17/93. CIP @ 05:46 hrs 10/17/93. Casing was cemented with 2876 sx (2675 cu ft) of Arctic Set I @ 15.7 ppg w/ 0.3% D-13. Cement returns to Glory Hole were confirmed with airlift samples to surface. 20" casing detail attached. 6 A formation leak-off test was performed after drilling 10' of new formation below the 20 " casing. A 15.0 ppg EMW test was obtained. Details of LOT are attached.																	

RECEIVED
OCS DISTRICT OFFICE

OCT 26 1993

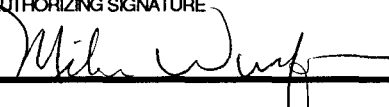
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)

SUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

WARNING: PUBLIC LAW 97-451 provides civil and criminal penalties for false or inaccurate reporting. Failure to report as required under the terms of the lease, permit, or contract may result in suspension of operations or other enforcement actions.

CONTACT NAME (First, MI, Last)	PHONE NUMBER (10)	EXTENSION NUMBER (4)
Tim Billingsley	(907) 265-6575	
AUTHORIZING NAME (First, MI, Last)	TITLE	
Michael B. Winfree	New Ventures Area Drilling Engineer	
AUTHORIZING SIGNATURE	DATE YYMMDD (6)	
	93 10 20	

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

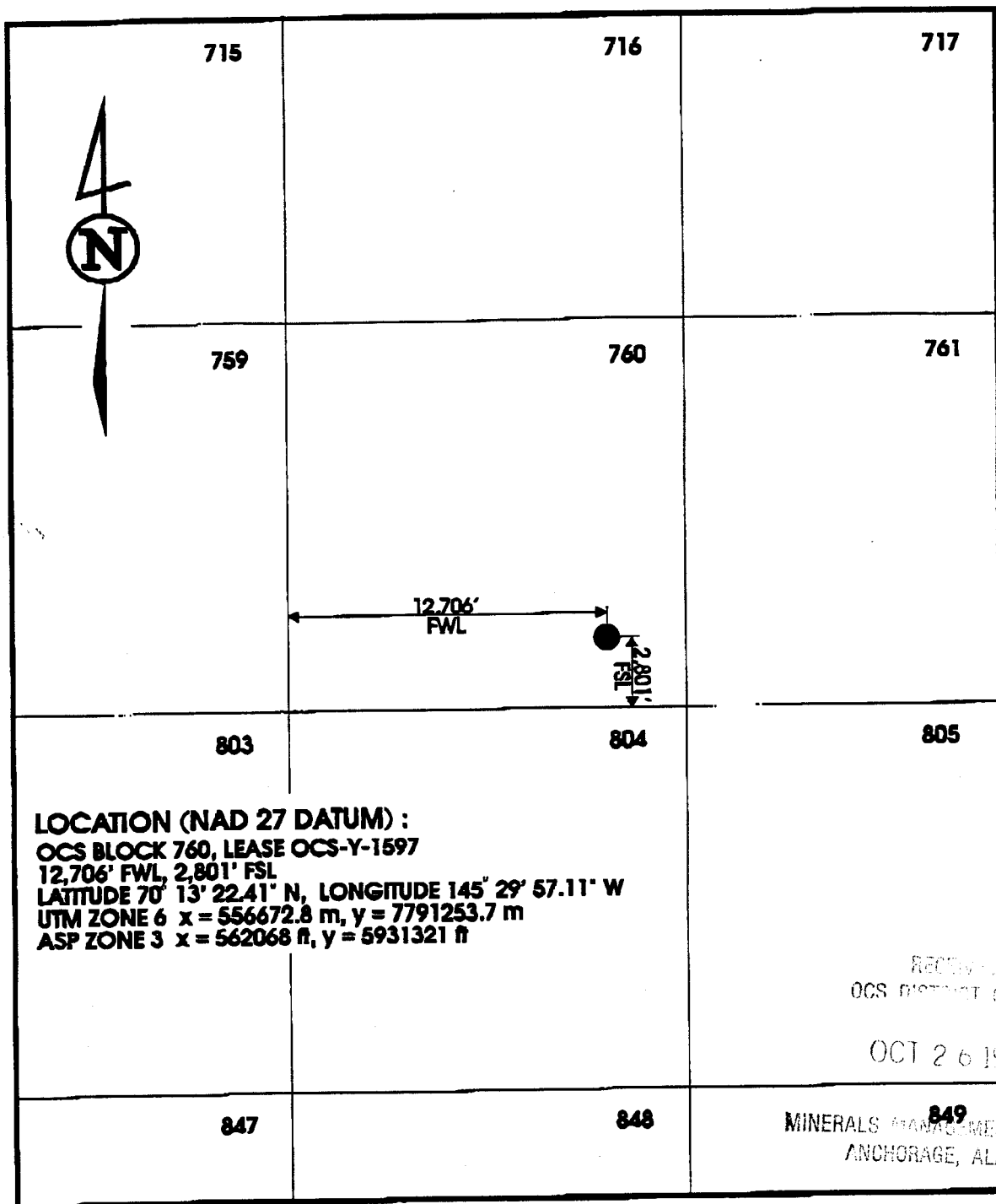
ARE ATTACHED ☐NONE ☐☒ APPROVED BY:☐ ACCEPTED BY:DATE (6)
YYMMDD

TITLE

PAPERWORK REDUCTION ACT STATEMENT

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that: This information is being collected to obtain knowledge of the equipment and procedures to be used during well-completion, workover, and production operations. This information will be used by the District Supervisor to evaluate and approve or disapprove the adequacy of the equipment and procedures to safely perform the proposed operations. Response to this request is mandatory (43 U.S.C. 1334).

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I, GEOFF WRIGHT, REGISTERED CANADA LANDS
SURVEYOR, HEREBY CERTIFY THAT THE SURVEY
SHOWN BY THIS PLAN WAS CORRECTLY EXECUTED,
AND THAT SAID PLAN IS CORRECT AND TRUE TO
THE BEST OF MY KNOWLEDGE AND BELIEF.

OCTOBER 19, 1993

GEOFF WRIGHT, C.L.S. #1343

**ARCO Y-1597 #1
BLOCK 760, NR 6-4
FINAL WELL POSITION**



NORTECH ATLANTIC LTD.

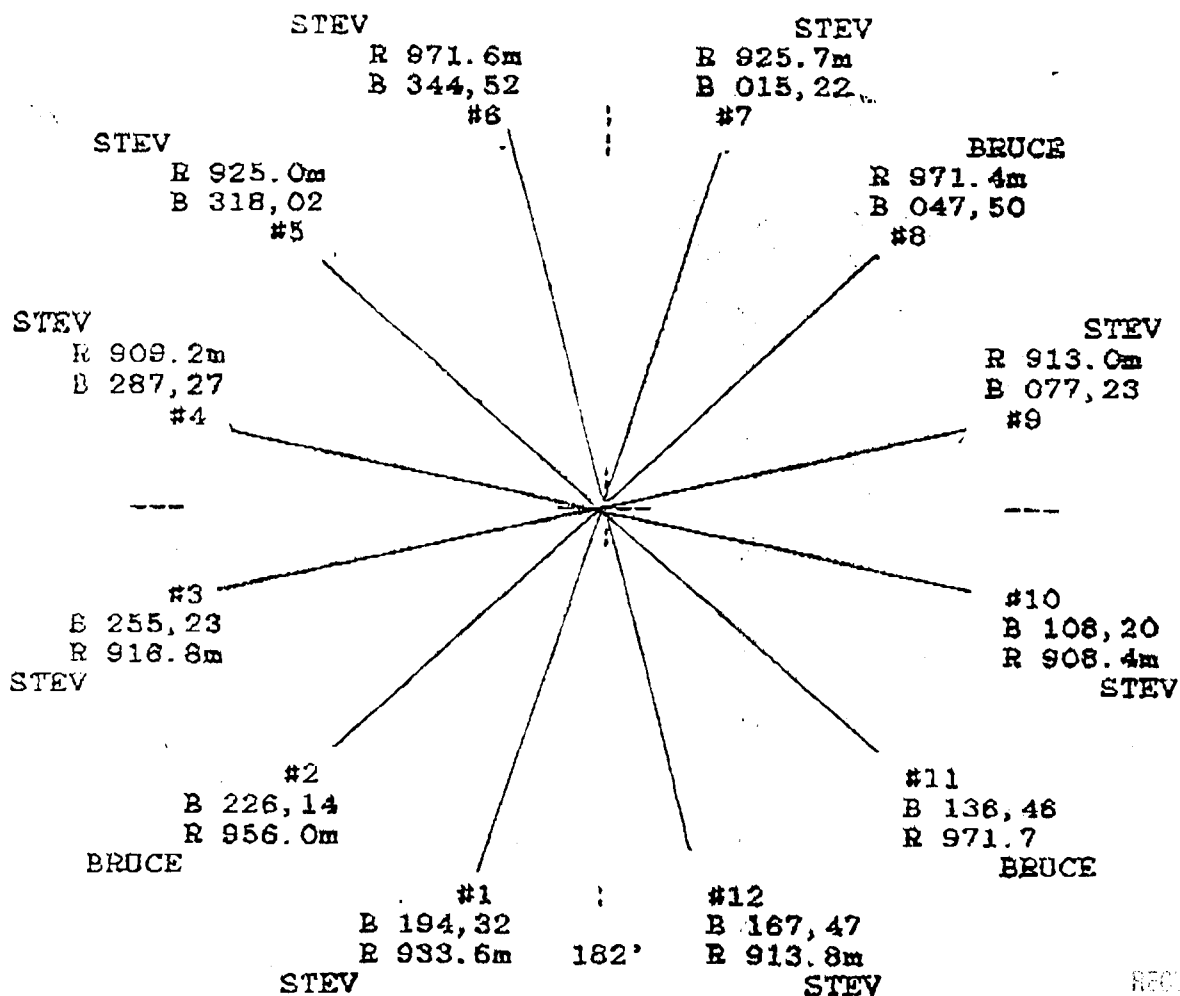
ANCHOR PATTERN

for

ARCO-Y-1597 # 1

12 POINT MOORING

STERN HEADING



RECEIVED
OCS DISTRICT OFFICE

OCT 26 1993

Submitted by: Dave Watson Oct. 7, 1993.

Dave Watson

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

[illegible]

[illegible]

"Y-1597 #1, 20" Leak-off Test

WELL: Y-1597 #1

DATE/TIME: 0600 10/20/93

SUPERVISOR: CAMPBELL/SCHULTZ

RIG: CDU KULLUK

MUD WEIGHT = 9.6 ppg = MW

TRUE VERTICAL DEPTH = 1030 FEET = TVD

HYDROSTATIC HEAD1 (HH 1) = $0.052 \times \text{TVD} \times \text{MW} = 514$ psi

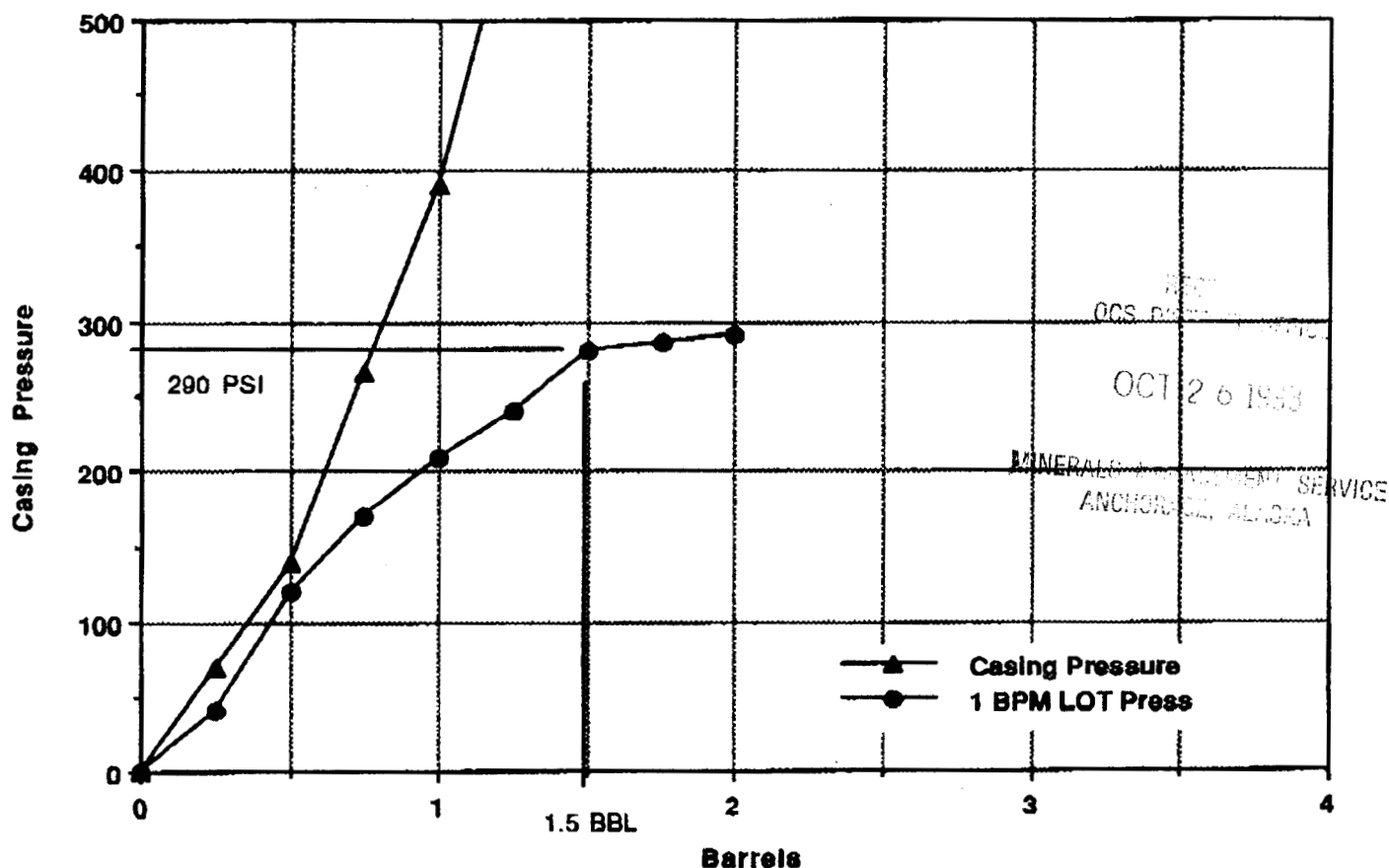
Leak-off test pressure taken from graph @ 290 psi with 1.5 barrels pumped.

Leak-off EMW = $((0.052 \times \text{TVD} \times \text{MW}) + (\text{Surface press})) / (\text{TVD} \times 0.052) = 804 / (1030 \times 0.052)$

Leak-off EMW = 15.0 ppg

Both casing and leak-off test pressures taken @ 1 BPM using Dowell unit.

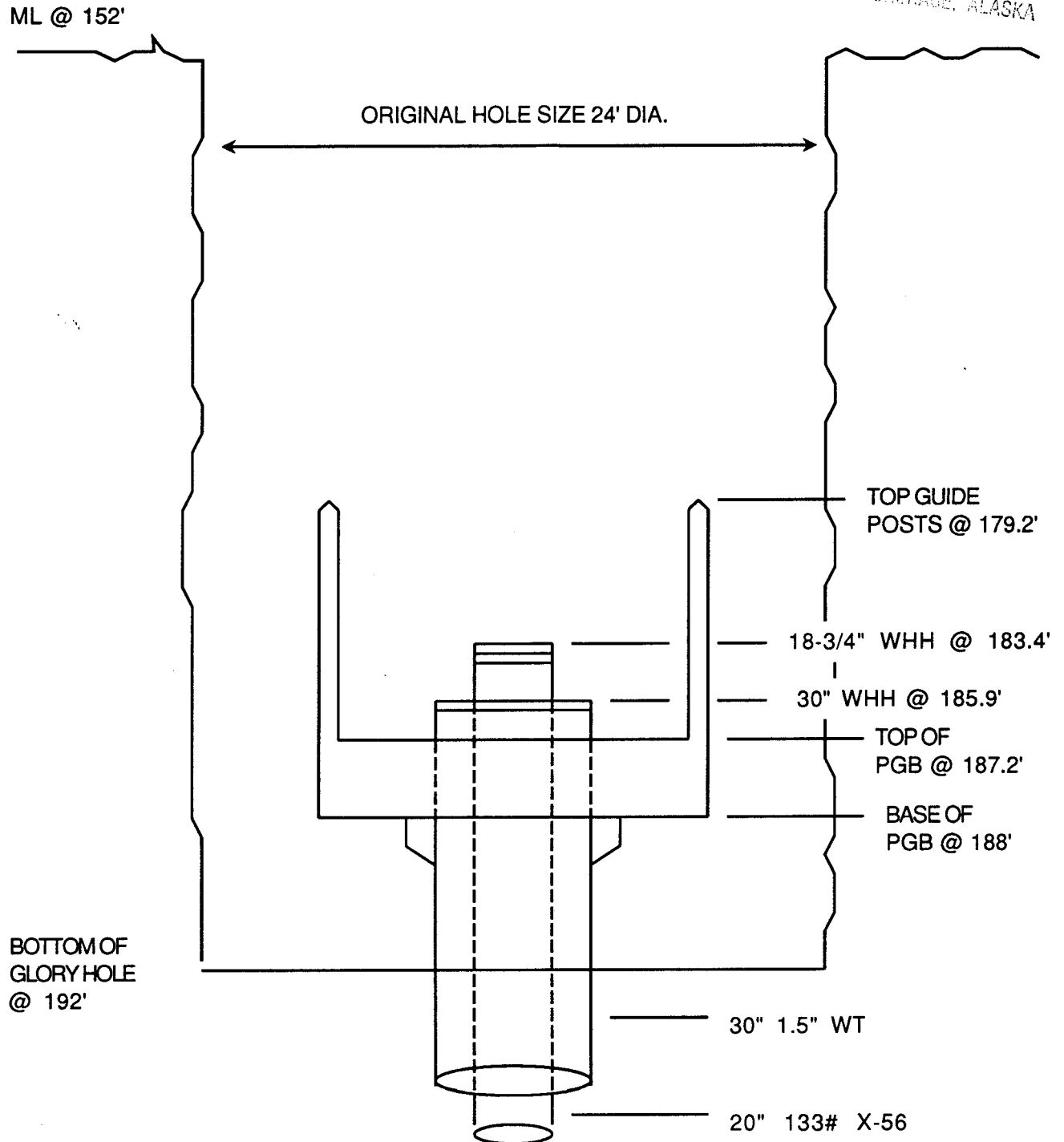
Held press for 5 mins. Formation leaked off - bled off from 290 psi to 210 psi in 5 min.

Pressure Profiles

Y-1597 #1
GLORY HOLE DIAGRAM

RECEIVED
OCS DISTRICT OFFICE
OCT 26 1993

MINERAL MANAGEMENT SERVICE
ANCHORAGE, ALASKA



NOTE: ALL DEPTHS ARE FROM ROTARY TABLE (RT)

GLA 10/18/93

DEPARTURE LOG
Alaska OCS Region

Well Name: WILD WEASEL #1	Lease: OCS-Y 1597	Operator: ARCO
---------------------------	-------------------	----------------

Date	Departure	Verbal or Written?	Written Follow-up
① 10/13/93	3 1/2" RAMS IN LIEU OF 5" RAMS ; BOP (ISM) - API DEPARTURE	WRITTEN	N/A
② 10/21/93	No wireline logs for 13 3/8" HOLE SECTION	VERBAL	10/25/93 SUNDAY NOTICE
③ 10/23/93	WEEKLY BOP TEST	VERBAL	10/24/93 DAILY REPORT

DRILLING OPERATIONS DEPARTURE FORM

Alaska OCS Region

Well Name: <u>WILD WEASEL #1</u>	Lease: <u>OCS-Y 1597</u>	Block <u>760</u>
Area: <u>CAMDEN BAY</u> <u>BEAUFORT SEA</u>	Operator: <u>ARCO</u>	Drill Unit: <u>KULLUK</u>

<u>Date</u>	<u>Departure</u>	<u>Requested by</u>	<u>Verbal/Written</u>
10/13/93	APD CHANGE	MIKE WINFREE (ARCO)	WRITTEN

Details of Operation to be Performed (include sketch if appropriate)

CHANGE FROM APD APPROVAL : KEEP 3 1/2" PIPE RAMS IN
TOP CAVITY OF BOP STACK INSTEAD OF REPLACING W/ 5" RAMS.

Request Approved by:

BRIAN SCHOOF

[Signature] District Supervisor
JBR Drilling Engineer 10/21/93
 Chief, PET
[Signature] Other

Instructions

1. All departures will be logged once approved; multiple departures can be logged on the same form.
2. Include a brief description of each departure or change requested.
3. When approved, departures will be provided to the RSFO, the after hours duty officer, and the inspection staff.
4. Departures granted in the field will be transmitted to the District Supervisor. A copy will be attached to the PINC list.

ARCO Alaska, Inc.
Post Office Box 100360
Anchorage, Alaska 99510-0360
Telephone 907-276-1215



October 13, 1993

United States Department of the Interior
Minerals Management Service
Alaska Outer Continental Shelf Region
949 East 36th Avenue, Suite 503
Anchorage, Alaska 99508-4302
(907) 271-6066 (907) 563-2857 (fax)

Received
OCS District Office

OCT 13 1993

Minerals Management Service
Anchorage, Alaska

Attention: Mr. Brian Schoof
District Office Supervisor

Subject: Sundry Notice #1, Form MMS-331
OCS-Y-1597 #1, Block 760
Beaufort Sea, Alaska

Dear Mr. Schoof:

Attached for your records is a Sundry Notice (Form MMS-331) for the following subject regarding the above referenced well:

1. A change from the approved APD is requested to use 3-1/2" pipe rams in the top ram cavity. The APD stated that only 5" rams would be installed in the BOP stack. This change is due to the remote possibility that this well may be tested this season with 3-1/2" production tubing. There will be two other BOP ram cavities with 5" rams.

The weekly BOP tests will not pressure test the 3-1/2" rams until such time that 3-1/2" tubing/pipe is required.

This notice is sent in triplicate with one public information copy. Thank you for maintaining the confidential nature of this information.

Any questions pertaining to this Sundry Notice should be directed to Tim Billingsley at 265-6575, or to me at 263-4603.

Yours truly,

ARCO ALASKA, INC.

M.B. Winfree
Area Drilling Engineer, New Ventures Drilling

enclosure

United States Department of the Interior
October 13, 1993
Page 2

cc: OCS-Y-1597 #1 Well File
F. C. Johnson
T.A. Billingsley

File W1
ATO-1404
ATO-1446

Received
OCS District Office

OCT 13 1993

Minerals Management Service
Anchorage, Alaska

SUNDRY NOTICES AND REPORTS ON WELLS

1. FIELD NAME Wildcat		2. MMS LEASE, UNIT OR COMM. NO. (6) Y 1597 0		3. MMS OPERATOR NUMBER (5) 0635													
4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1	5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011	SIDE TRACK (2) NA	COMPLETION CODE (3) E	6. TYPE WELL (1) E	7. CORRECTED ELEVATION (5) 66' RKB-MSL est												
8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360		9. CURRENT WELL DEPTH (5) MD 0' TVD 0' LEAVE BLANK		10. CORRECTED WATER DEPTH (5) 88' est													
11. CORRECTED LOCATION OF WELL (12) Surface: 2800' FSL and 3100' FEL of Block 760 planned Production zone: NA Total depth: NA			12. OPERATING AREA CODE (2) FI	13. BLOCK NUMBER (6) 0760													
			14. MAP OR OFFICIAL PROTRACTION DIAGRAM NUMBER (7) NR 6-4, Flaxman Island														
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME Kuvlum		16. RIG/PLATFORM NAME BeauDriI - Kulluk		17. RIG TYPE (2) SS													
18. WELL STATUS, e.g., shut-in, drilling, etc. Preparing to spud	19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) none		20. APPROXIMATE START DATE (6) YYMMDD 93 10 13														
21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA																	
22. CHECK APPROPRIATE ACTIVITY:		<table border="0" style="width:100%;"> <tr> <td>Fracture/acidize <input type="checkbox"/></td> <td>Artificial Lift <input type="checkbox"/></td> <td>Other <input checked="" type="checkbox"/></td> </tr> <tr> <td>Pull or alter casing <input type="checkbox"/></td> <td>Repair well <input type="checkbox"/></td> <td>Perforate <input type="checkbox"/></td> </tr> <tr> <td>Sidetrack <input type="checkbox"/></td> <td>Deepen <input type="checkbox"/></td> <td>Plug back <input type="checkbox"/></td> </tr> <tr> <td>Reenter to complete <input type="checkbox"/>*</td> <td>Multiple complete <input type="checkbox"/>*</td> <td>Recomplete <input type="checkbox"/>*</td> </tr> </table> <p>Note: Submit a separate Well (Re) Completion Report and a subsequent report of operations on this form for each completion. Alternatively, submit a Well (Re) Completion Report for each completion with a narrative as in Item 23 of this form.</p>				Fracture/acidize <input type="checkbox"/>	Artificial Lift <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Pull or alter casing <input type="checkbox"/>	Repair well <input type="checkbox"/>	Perforate <input type="checkbox"/>	Sidetrack <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug back <input type="checkbox"/>	Reenter to complete <input type="checkbox"/> *	Multiple complete <input type="checkbox"/> *	Recomplete <input type="checkbox"/> *
Fracture/acidize <input type="checkbox"/>	Artificial Lift <input type="checkbox"/>	Other <input checked="" type="checkbox"/>															
Pull or alter casing <input type="checkbox"/>	Repair well <input type="checkbox"/>	Perforate <input type="checkbox"/>															
Sidetrack <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug back <input type="checkbox"/>															
Reenter to complete <input type="checkbox"/> *	Multiple complete <input type="checkbox"/> *	Recomplete <input type="checkbox"/> *															
<p>23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details in this space and on the reverse, and/or on an attachment, and give pertinent dates, including estimated date for starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)</p> <p>1 Waiver is requested to install one set of 3-1/2" pipe rams in 15M BOP stack. Two other ram cavities will have 5' rams installed. Verbal approval from Mr. Brian Schoof for this change from the APD was obtained on 10/12/93.</p>																	

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OCS District Office

OCT 13 1993

Minerals Management Service
Anchorage, Alaska

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)

Received
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OCT 13 1993

Minerals Management Service
Anchorage, AlaskaSUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

WARNING: PUBLIC LAW 97-451 provides civil and criminal penalties for false or inaccurate reporting. Failure to report as required under the terms of the lease, permit, or contract may result in suspension of operations or other enforcement actions.

CONTACT NAME (First, MI, Last)	PHONE NUMBER (10)	EXTENSION NUMBER (4)
Tim Billingsley	(907) 265-6575	
AUTHORIZING NAME (First, MI, Last)	TITLE	
Michael B. Winfree	New Ventures Area Drilling Engineer	
AUTHORIZING SIGNATURE	DATE YYMMDD (6)	
<i>Mike Winfree by Ted Johnson</i>	93 10 13	

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

ARE ATTACHED ☐NONE ☐

DATE (6)

YYMMDD

☒ APPROVED BY: *[Signature]*☐ ACCEPTED BY: *[Signature]*

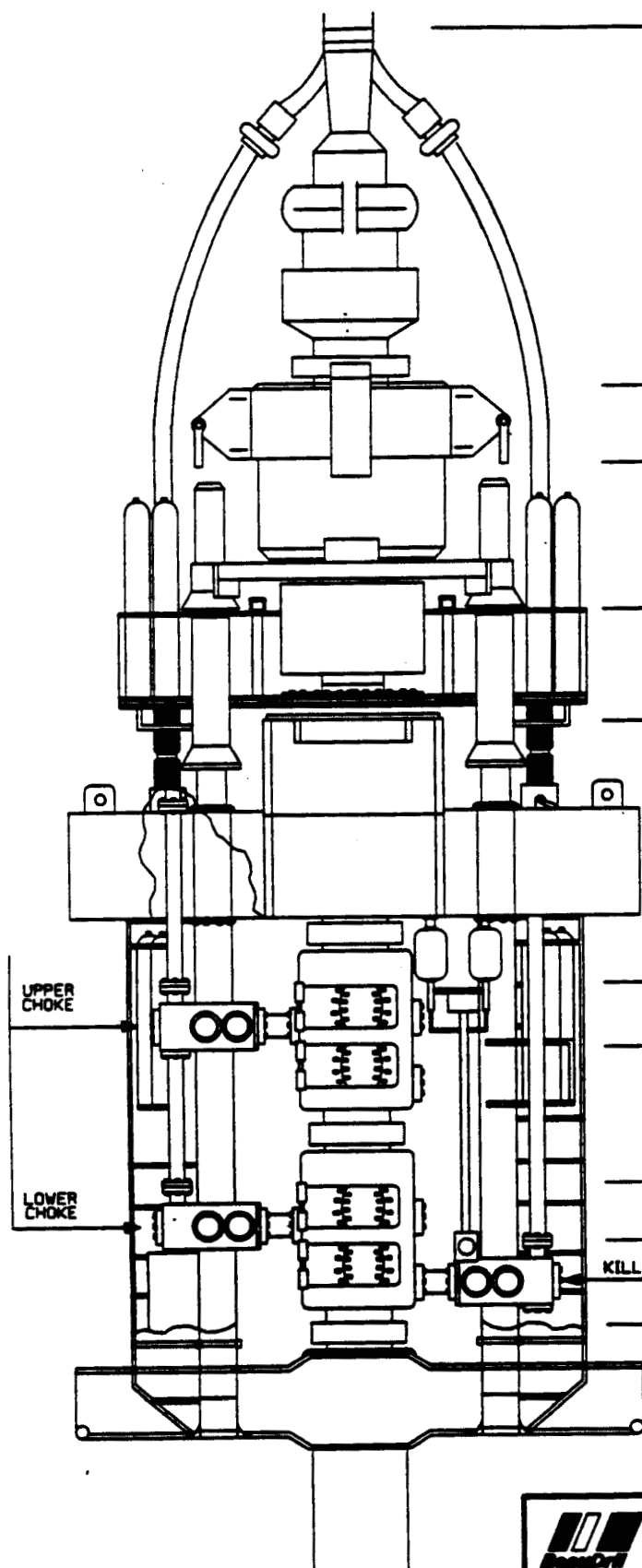
TITLE

Assistant Supervisor 93 10 25

PAPERWORK REDUCTION ACT STATEMENT

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that: This information is being collected to obtain knowledge of the equipment and procedures to be used during well-completion, workover, and production operations. This information will be used by the District Supervisor to evaluate and approve or disapprove the adequacy of the equipment and procedures to safely perform the proposed operations. Response to this request is mandatory (43 U.S.C. 1334).

Public reporting burden for this form is estimated to average 1/2 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 631, Minerals Management Service, 12203 Sunrise Valley Drive, Reston, VA 22091; and Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.



15M STACK

METERS	FEET
11.25	36.91

TOP OF BALL JOINT
& ADAPTOR

Received
OCS District Office

OCT 13 1993

Minerals Management Service
Anchorage, Alaska

8.75 28.71 TOP UPPER SPHERICAL

7.86 25.79 TOP GUIDE POST
(EXTENDED)

6.95 22.80 TOP LMRP CONNECTOR

5.78 18.78 TOP LOWER SPHERICAL

3.78 12.14 TOP SHEAR RAMS

3.19 18.47 TOP UPPER RAMS 3 1/2"

1.77 5.88 TOP MIDDLE RAMS 5"

1.26 4.13 TOP LOWER RAMS 5"

0.0 0.0 TOP OF WELLHEAD



KULLUK OPERATIONS MANUAL

DATE:
910108

PROJECT No.
888014

FILE No.
DIA 650

FIGURE 16.1.2

15m BOP
Stack Arrangement



IN REPLY REFER TO:

United States Department of the Interior

MINERALS MANAGEMENT SERVICE

Alaska Outer Continental Shelf Region

949 E. 36th Avenue, Room 603

Anchorage, Alaska 99508-4302



OCT 8 1993

Mr. M. Winfree
ARCO Alaska, Inc.
Post Office Box 100360
Anchorage, Alaska 99510-0360

Dear Mr. Winfree:

Enclosed is the approved Notice of Intent/Report of Well Abandonment received
October 4, 1993, for OCS-Y 0866 #2, Kuvlum #3 Prospect.

Sincerely,

Orig. Sgnd. By Brian Schoof

Brian F. Schoof
Supervisor, District Office
Field Operations

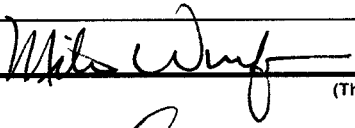
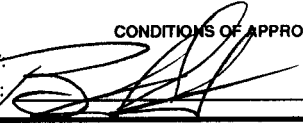

Enclosure

bcc: OCS-Y 0866 #2 (Kuvlum #3) 6a - Area/District
Chronos Area/District/CC/RD
BSchoof:10-08-93:nll:0866_aband

OMB Approval No. 1010-0077
Expires: OCTOBER 31, 1994

1. FIELD NAME Wildcat						2. MMS LEASE, UNIT OR COMM. NO. (6) Y 0866 0						3. MMS OPERATOR NUMBER (5) 635					
4. OPERATOR WELL NUMBER (7) 3				5. DATE (RE)COMPLETED (6) YYMMDD 93-10-04 est				6. API NUMBER (10 OR 12) SIDE STATE (2) COUNTY (3) SEQUENCE (5) TRACK (2) 55 171 00010						COMPLETION CODE (3)			
7. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, Ak 99510-0360								8. WELL TYPE (1) E						9. DATE SPUDDED (6) YYMMDD 93/9/9			
								10. SIDETRACKED (6) YYMMDD NA						LEAVE BLANK			
11. FINAL LOCATION OF WELL (12) Surface: 7743' FWL, 9643' FSL of Block 673 Production zone: NA Total depth: NA								12. OPERATING AREA CODE (2) FI				13. BLOCK NUMBER (6) 673					
								14. MAP OR OFFICIAL PROTRACTION DIAGRAM NUMBER (7) NR 6-4, Flaxman Island									
15. OPERATOR LEASE UNIT OR COMMUNITIZATION NAME Kuvlum								16. NOTICE OF INTENT SUBMITTAL SUBSEQUENT REPORT <input checked="" type="checkbox"/>				17. TYPE OF TEMPORARY <input type="checkbox"/> ABANDONMENT PERMANENT <input checked="" type="checkbox"/>					
18. DATE TD REACHED (6) YYMMDD 93/09/28				19. TOTAL DEPTH (5) MD 8000' TVD 8000'				20. PLUG BACK DEPTH (5) (PROPOSED) MD 226' TVD 226'				21. DATE ABANDONED (6) YYMMDD PROPOSED <input checked="" type="checkbox"/> 93/10/04 est. COMPLETED <input type="checkbox"/>					
22. ELECTRIC AND OTHER LOGS RUN (MAY BE OMITTED IF PREVIOUSLY SUBMITTED) AIT Sonic, GR, SP, LDT, CNL, NGT, Microlog, FMI, PERCUSSION SWC, RFT, VSP																	
23. CASING RECORD (Report all strings unless previously submitted)																	
HOLE SIZE (4)		CASING SIZE (4), LB/FT (5) & GRADE				SETTING DEPTH		QUANTITY OF CEMENT (CU. FT./TYPE)									
						MD (5)	TVD (5)										
26"		30" 457 X-52				308'	308'	30" casing drilled in place									
26"		20" 133 X-56				1023'	1023'	3790 cu. ft. Arctic Set I									
17.5"		13-3/8" 68 L-80				3681'	3681'	1729 cu. ft. Class G w/ 2% gel, 449 cu. ft. Class G									
CASING PULLED												BRIDGE PLUGS/RETAINERS					
CASING SIZE (4)		SHOT/CUT AT		PULLED FROM		DEPTH SET MD (5)		DESCRIPTION									
		MD (5)	TVD (5)	MD(5)	TVD (5)												
JUNK IN HOLE																	
DESCRIPTION								FROM		TO							
PLUGGING RECORD																	
DEPTH INTERVAL MD (5)				AMOUNT, SLURRY COMPOSITION, AND METHOD OF PLACEMENT													
(Proposed)																	
6200'-6500'				250 cu ft Class G, open hole balanced plug													
3475'-3810'				168 cu ft Class G cement below retainer @ 3610' and 112 cu ft cement above retainer													
226'-400'				168 cu ft Arctic Set I above retainer @ 400' RKB													

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

FORM MMS-332						NOTICE OF INTENT/REPORT OF WELL ABANDONMENT		PAGE 2	
24. PRODUCTION HISTORY (Development wells only)									
DATE LAST PROD (4) YYYYMM		WELL STATUS		OIL-BBL (6)	GAS-MCF (6)	WATER-BBL (6)	GAS/OIL RATIO (6)	SHUT-IN TUBING PRESSURE (5)	
NA				PROD. FOR LAST PERIOD					
ALL PERFORATED INTERVALS CURRENTLY OPEN (5)									
REASON FOR ABANDONMENT (Include supportive well logs and test data): NA									
SITE CLEARANCE DATE (6) YYYYMMDD			EXTENT OF SITE SEARCH			SITE CLEARED BY			
SUMMARY OF POROUS ZONES: SHOW ALL ZONES CONTAINING HYDROCARBONS; ALL CORED INTERVALS; AND ALL DRILL STEM TESTS, INCLUDING DEPTH AND INTERVAL TESTED, CUSHION USE, TIME TOOL WAS OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.									
FORMATION		TOP		BOTTOM		DESCRIPTION, CONTENTS, ETC.			
		MD (5)	TVD (5)	MD(5)	TVD (5)				
GEOLOGIC MARKERS NAME		TOP		NAME		TOP			
		MD(5)	TVD (5)			MD (5)	TVD (5)		
WARNING: PUBLIC LAW 97-451 provides civil and criminal penalties for false or inaccurate reporting. Failure to report as required under the terms of the lease permit, or contract may result in suspension of operations or other enforcement actions.									
CONTACT NAME (First, MI, Last) Tim A. Billingsley				PHONE NUMBER (10) 907-265-6575		EXTENSION NUMBER (4) XXXX			
AUTHORIZING NAME (First, MI, Last) Michael B. Winfree				TITLE Area Drilling Engineer					
AUTHORIZING SIGNATURE 				DATE YYYYMMDD (6) 93-10-01					
(This space is for Federal office use)									
<input checked="" type="checkbox"/> APPROVED BY: 				CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:		ARE ATTACHED <input type="checkbox"/> NONE <input type="checkbox"/>		DATE (6) YYYYMMDD OCT 29 93	
<input type="checkbox"/> ACCEPTED BY: 				TITLE: Director Supervisor					
PAPERWORK REDUCTION ACT STATEMENT									
The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that: This information is being collected to obtain knowledge of the equipment, materials, and procedures to be used during well abandonment operations. This information will be used by MMS District Supervisors to evaluate and approve or disapprove the adequacy of the equipment, materials, and/or procedures which the lessee plans to use during the conduct of well-abandonment operations including temporary abandonments. Response to this request is mandatory (43 U.S.C. 1604).									
Public reporting burden for this form is estimated to average 1/2 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 2300, Minerals Management Service, 381 Eldon Street, Herndon, VA 22070-4817; and Office of Management and Budget, Paperwork Reduction Project (OMB No. 1010-0077), Washington, DC 20503.									

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 MMS DISTRICT OFFICE
 OCT 04 1993
 MINERALS MANAGEMENT SERVICE
 ANCHORAGE, ALASKA

Kuvlum #3 P&A Procedure

General Information

Geometry: Mudline @ 172' RKB
30" @ 308' RKB
20" @ 1023' RKB
13-3/8" @ 3681' RKB
12-1/4" hole at 8000'

Status: Operation prior to P&A: Logging.

Hydrocarbon Zone :
6330'-6375'

Mud weight = 10.5 ppg.

Objectives: Set open hole balanced cement plug across hydrocarbon interval from $\pm 6200'$ -6500'

Set retainer at base of 13-3/8" casing and pump 30 bbl cement thru retainer and dump 20 bbl on top of retainer.

Perforate 13-3/8" at 420', set retainer and pressure test 13-3/8" x 20" annulus.

Lay in balanced cement plug from 400'-200' RKB.

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1. After completing logging runs, RIH with drill pipe to 6850'.
2. Spot a balanced 50 bbl viscous pill (10.7 ppg) from 6850' to 6500'. Displace with mud.
3. Spot a balanced 15.8 ppg 211 sx (44 bbl) cement plug on top of viscous mud pill from 6500'-6200' (geologic interpretation of hydrocarbon interval in Kuvlum #3 is 6330'-6375'). Preliminary Dowell pill formula is:

211 sx Class G
.5% D-800 retarder

Yield= 1.17 cu. ft./sk
Set time = 4:30 at
130°F BHST,
110°F BHCT

4. POH with open ended drill pipe. (Tag of plug is **not** required by MMS)
5. Set EZSV retainer at 3610' RKB with 13-3/8" shoe @ 3681'.
6. Establish injection thru retainer.

(If sufficient rate can not be established, notify MMS and unstring from retainer and use as a bridge plug. Lay in 75 sx of cement on top of bridge plug.)

7. Mix 50 bbl (240 sx) Class G cement.

240 sx Class G
.05 G/sk D-47 anti-foam
2% CaCl₂

Yield= 1.18 cu. ft./sk
Set time = 8:10 at
60°F BHST
50°F BHCT

8. Pump 30 bbl cement below retainer. (11 bbl is volume of 71' of 13-3/8" casing below retainer and 19 bbl of additional cement will extend 130' below shoe)
9. Unstring from retainer and lay in 20 bbl of cement on top of retainer.
10. POH with drill pipe.
11. Shoot holes in 13-3/8" 68# L-80 casing at $\pm 450'$. Avoid penetrating 20" casing.
12. POH with wireline. Close blind rams and pressure test 13-3/8" x 20" annulus to 500 psi via perforation holes.
13. RIH with retainer on drill pipe and set at 400'. If pressure test did not hold, attempt to establish pump rate thru retainer and squeeze Arctic Set I into 13-3/8" x 20" annulus. (Volume for 100' in annulus is 18 bbls or 95 sx)

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ANCHORAGE, ALASKA

14. Unsting from retainer and lay-in balanced cement plug of Arctic Set I from 400' to 200' RKB. (Mudline @ 172' RKB)

Preliminary Dowell pill formula is:

185 sx (30 bbls) Arctic Set I @ 15.8 ppg
.5% D-13

Yield= 0.91cu. ft./sk
Set time = 3:38 at
40°F BHST,
45°F BHCT

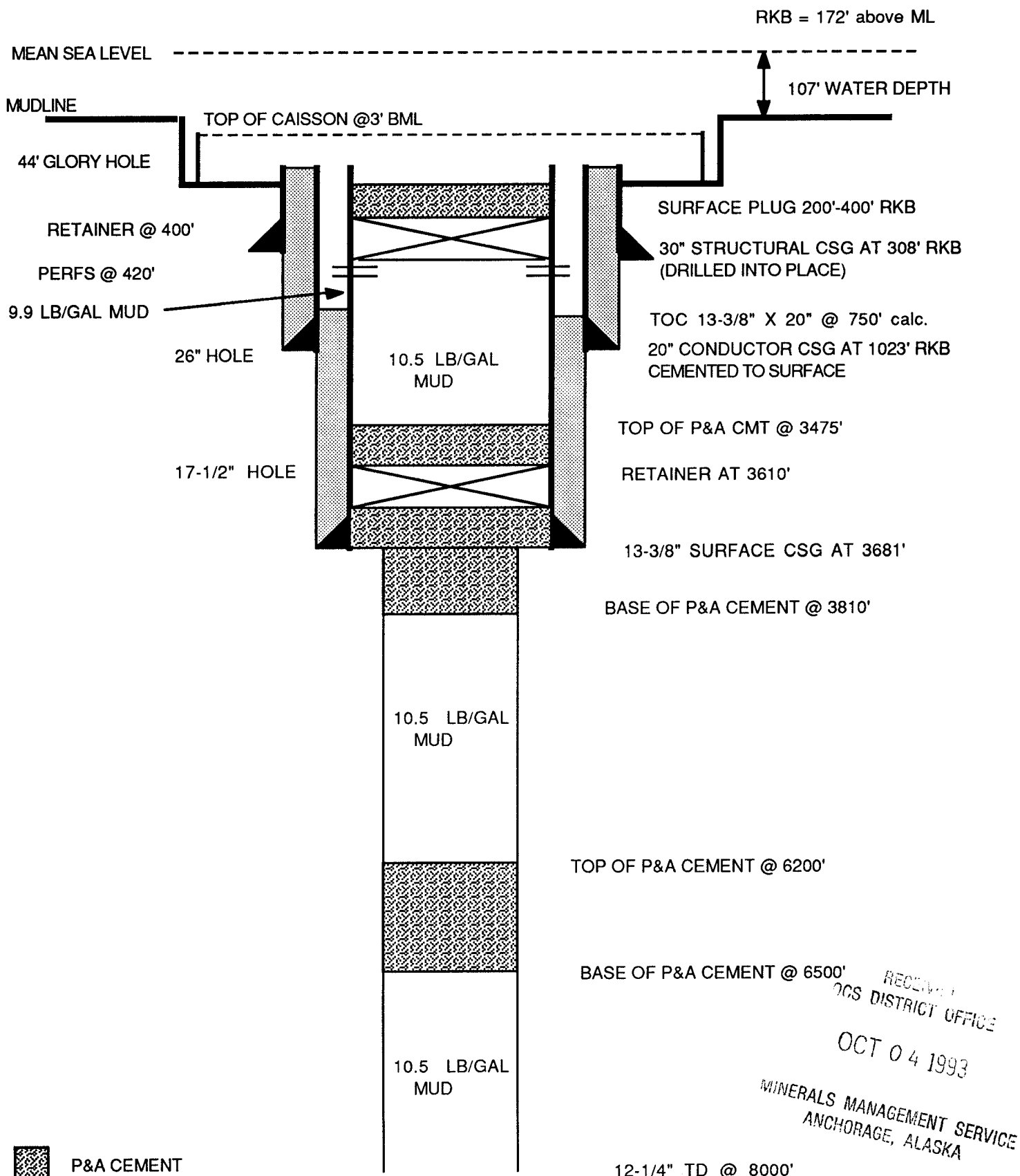
15. POH and disconnect from well and prepare to move. Leave wellhead on Kuvlum #3. A waiver has been verbally granted to leave the top of caisson at 3' BML.
16. Perform diver search on Kuvlum #3 wellbore for site clearance.

TAB 10/3/93

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OCT 04 1993
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

KUVLUM #3

PROPOSED P&A STATUS OF EXPLORATION WELL



TB 10/3/93

Brian - Analysis of Knulm#3
abandonment below. I recommend
approval of the proposed abandonment.

Jim Regg 10/4/93
JBR 10/5/93

J. Regg; 10/4/93

ABANDONMENT PROGRAM

1. Hydrocarbon Interval Plug Interval (ft):

6200	6500
------	------

MMS Requirement

Hole Size (in.)	Capacity (cf/ft)	Length (ft)	Volume (cf)
12.25	.8185	300	246

Design (Abandonment Plan)

Cement (sx)	Yield (cf/sx)	Volume (cf)	Length (ft)
211	1.17	247	302
226 ⁵ (ACTUAL) 10/5/93			

Design > Req't?	Comments
Yes	hydrocarbon interval 6330 - 6375 ft

2. Shoe of 13-3/8" csg Plug Interval (ft):

3610	3810
3475	3610

casing shoe at 3681

MMS Requirement

Hole Size (in.)	Capacity (cf/ft)	Length (ft)	Volume (cf)
12.4	.8386	50	42
12.4	.8386	171	143
		221	185

Design (Abandonment Plan)

Cement (sx)	Yield (cf/sx)	Volume (cf)	Length (ft)
96	1.18	113	135
144	1.18	170	203
240	1.18	283	338
227 sx (actual) 10/5			

Design > Req't?	Comments
Yes	on top retainer @ 3610 ft (71 ft above shoe)
Yes	100 ft below casing shoe
Yes	

Retainer @ 3625' (ACTUAL) 10/5/93

3. Squeeze 13-3/8" x 20" Plug Interval (ft):

300	400
-----	-----

MMS Requirement

Hole Size (in.)	Capacity (cf/ft)	Length (ft)	Volume (cf)
annulus	.9377	100	94

Design (Abandonment Plan)

Cement (sx)	Yield (cf/sx)	Volume (cf)	Length (ft)
95	0.91	86	92

Design > Req't?	Comments
???	perfs squeezed; see regs

- test held OK; no squeeze 10/5/93

4. Surface Depth Interval (ft)

200	400
-----	-----

MMS Requirement

Hole Size (in.)	Capacity (cf/ft)	Length (ft)	Volume (cf)
12.4	.8386	150	126

Design (Abandonment Plan)

Cement (sx)	Yield (cf/sx)	Volume (cf)	Length (ft)
185	0.91	168	201

Design > Req't?	Comments
Yes	Regs require 150 ft surface plug

151 sx actual (140 cf)

TOC @ 233' 10/5/93

30 CFR 250.112:

- minimum 100 ft above and below deepest casing shoe, or cement retainer with 50 ft cement above retainer and 100 ft below casing shoe
- minimum 100 ft below and above hydrocarbon intervals in open hole
- minimum 100 ft above perforated intervals
- minimum 150 ft surface plug, the top within the first 150 ft below mudline
- test first plug (cement plug, retainer, or bridge plug) below surface with 15000 lbs pipe weight or 1000 psi
- perforations must be isolated from the hole below

ARCO Alaska, Inc.
Post Office Box 100360
Anchorage, Alaska 99510-0360
Telephone 907-276-1215



October 1, 1993

United States Department of the Interior
Mineral Management Service
Alaska Outer Continental Shelf Region
949 East 36th Avenue, Suite 503
Anchorage, Alaska 99508-4302
(907) 271-6066

RECEIVED
OCS DISTRICT OFFICE

OCT 04 1993

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

Attention: Mr. Brian Schoof
District Office Supervisor

Subject: Form: MMS-332
Intent of Well Abandonment
OCS-Y-0866 #2, Block 673
Kuvlum #3 Prospect
Beaufort Sea, Alaska

Dear Mr. Schoof:

Attached please find copies of Form MMS-332 which provides details of the proposed abandonment of the subject well. Also attached is a wellbore diagram of the proposed well abandonment and a proposed procedure.

The calculated top of cement in the 13-3/8" x 20" annulus is 250' above the 20" shoe. Perforations will be shot in the 13-3/8" casing and a pressure test will be conducted to confirm that this annulus is sealed by cement.

The top of the caisson is at 3' below mud line. It is requested to allow the caisson to remain at this depth.

Any questions pertaining to these Notices should be directed to me at 263-4603 or to Tim Billingsley at 265-6575.

Yours Truly,


ARCO Alaska, Inc.

M. B. Winfree
Area Drilling Engineer, New Ventures Drilling

ARCO Alaska, Inc.
Post Office Box 100360
Anchorage, Alaska 99510-0360
Telephone 907-276-1215



September 28, 1993

Received
OCS District Office

United States Department of the Interior
Mineral Management Service
Alaska Outer Continental Shelf Region
949 East 36th Avenue, Suite 503
Anchorage, Alaska 99508-4302
(907) 271-6066

SEP 29 1993
Minerals Management Service
Anchorage, Alaska

Attention: Mr. Brian Schoof
District Office Supervisor

Subject: Form: MMS-332
Report of Well Abandonment
OCS-Y-0865 #1, Block 672
Kuvlum #2 Prospect
Beaufort Sea Alaska

Dear Mr. Schoof:

Attached please find revised copies of Form MMS-332 which provide details of the actual abandonment of the subject well. The reason for the revision is the inclusion of geologic markers with preliminary paleontological correlations between Kuvlum #1 and Kuvlum #2 which were not included in the forms sent to you on 9/2/93. Two copies are attached with one Public Information copy. Also attached is a wellbore diagram of the well abandonment and a summary of the P&A procedure.

The top of the caisson was left at 12.5' below mud line. It was previously discussed that this would be sufficient and the requirement of being 15' below mud line would be waived.

Any questions pertaining to these Notices should be directed to me at 263-4603 or to Tim Billingsley at 265-6575.

Yours Truly,

ARCO Alaska, Inc.

M. B. Winfree
Area Drilling Engineer, New Ventures Drilling

SEP 29 1993

Minerals Management Service
Anchorage, Alaska

Preliminary Correlations

<u>Kuvlum #2</u>	<u>Biostrat Zones</u>	<u>Kuvlum #1</u>
In at 1030' T/Spl.	F-2A	?
1590'	F-2B(1)	In at 1015' T/Spl.
2460'	F-2B(2a)	2100'
3540'	F-2B(2b)	3270'
4680'	F-2B(3)	4190'
5820'	F-3A(1a)	5420'
6480'	F-3A(1b)	Missing
7200'	"	6440' (Depressed top)
7500'	F-3A(1c)	6800'

Interpreted by:

Michael B. Mickey
MICROPALAEO CONSUTANTS, INC.

MMSU.S. Department of the Interior
Minerals Management Service

OMB APPROVAL NO. 1010-0045

EXPIRES: OCTOBER 31, 1991

SUBMIT: Original,

two copies, and one public
information copy.

Public Information

SUNDRY NOTICES AND REPORTS ON WELLS

1. FIELD NAME Wildcat		2. MMS LEASE, UNIT OR COMM. NO. (6) Y 1597 0		3. MMS OPERATOR NUMBER (5) 0635	
4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1		5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011		6. TYPE WELL (1) E	
8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360		9. CURRENT WELL DEPTH (5) MD 0' TVD 0' LEAVE BLANK		7. CORRECTED ELEVATION (5) 66' RKB-MSL est	
11. CORRECTED LOCATION OF WELL (12) Surface: 2800' FSL and 3100' FEL of Block 760 planned Production zone: NA Total depth: NA		12. OPERATING AREA CODE (2) FI		13. BLOCK NUMBER (6) 0760	
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME Kuytun		16. RIG/PLATFORM NAME BeauDril - Kulluk		14. MAP OR OFFICIAL PROTRACTION DIAGRAM NUMBER (7) NR 6-4, Flaxman Island	
18. WELL STATUS. e.g., shut-in, drilling, etc. Preparing to spud		19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) none		17. RIG TYPE (2) SS	
20. APPROXIMATE START DATE (6) YYMMDD 93 10 13		21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA			
22. CHECK APPROPRIATE ACTIVITY: Data correction <input type="checkbox"/> Change plans <input checked="" type="checkbox"/> Request approval <input checked="" type="checkbox"/> Subsequent report <input type="checkbox"/>		Fracture/acidize <input type="checkbox"/> Pull or alter casing <input type="checkbox"/> Sidetrack <input type="checkbox"/> Reenter to complete <input type="checkbox"/> Artificial Lift <input type="checkbox"/> Repair well <input type="checkbox"/> Deepen <input type="checkbox"/> Multiple complete <input type="checkbox"/> Other <input checked="" type="checkbox"/> Perforate <input type="checkbox"/> Plug back <input type="checkbox"/> Recomplete <input type="checkbox"/> Note: Submit a separate Well (Re) Completion Report and a subsequent report of operations on this form for each completion. Alternatively, submit a Well (Re) Completion Report for each completion with a narrative as in item 23 of this form.			
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Received
OCS District Office

OCT 13 1993

Minerals Management Service
Anchorage, Alaska

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)

Received
OCS District Office

OCT 13 1993

Minerals Management Service
Anchorage, AlaskaSUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

WARNING: PUBLIC LAW 97-451 provides civil and criminal penalties for false or inaccurate reporting. Failure to report as required under the terms of the lease, permit, or contract may result in suspension of operations or other enforcement actions.

CONTACT NAME (First, MI, Last)	PHONE NUMBER (10)	EXTENSION NUMBER (4)
Tim Billingsley	(907) 265-6575	
AUTHORIZING NAME (First, MI, Last)	TITLE	
Michael B. Winfree	New Ventures Area Drilling Engineer	
AUTHORIZING SIGNATURE	DATE YYMMDD (6)	
<i>Michael B. Winfree by Fred Johnson</i>	93 10 13	

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

ARE ATTACHED ☐NONE ☐DATE (6)
YYMMDD☒ APPROVED BY: *[Signature]*☐ ACCEPTED BY: *[Signature]*TITLE *Supervisor*

PAPERWORK REDUCTION ACT STATEMENT

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Public Information

SUNDRY NOTICES AND REPORTS ON WELLS

1. FIELD NAME Wildcat		2. MMS LEASE, UNIT OR COMM. NO. (6) Y 1597 0		3. MMS OPERATOR NUMBER (5) 0635	
4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1		5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011		6. TYPE WELL (1) E	
8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360		9. CURRENT WELL DEPTH (5) MD 1000' TVD 1000' LEAVE BLANK		7. CORRECTED ELEVATION (5) 65' RKB-MSL	
11. CORRECTED LOCATION OF WELL (12) Surface: 2801' FSL and 3134' FEL (12,706' FWL) of Block 760 Production zone: NA Total depth: NA		12. OPERATING AREA CODE (2) FI		13. BLOCK NUMBER (6) 0760	
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME Kuvlum		16. RIG/PLATFORM NAME BeauDril - Kulluk		14. MAP OR OFFICIAL PROTRACTION DIAGRAM NUMBER (7) NR 6-4, Flaxman Island	
18. WELL STATUS, e.g., shut-in, drilling, etc. Circulating		19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) 20", 133 lb/ft, X-56 @ 1000'		17. RIG TYPE (2) SS	
20. APPROXIMATE START DATE (6) YYMMDD 93 10 13		21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA			
22. CHECK APPROPRIATE ACTIVITY:		Fracture/acidize <input type="checkbox"/> Artificial Lift <input type="checkbox"/> Other <input checked="" type="checkbox"/> Pull or alter casing <input type="checkbox"/> Repair well <input type="checkbox"/> Perforate <input type="checkbox"/> Sidetrack <input type="checkbox"/> Deepen <input type="checkbox"/> Plug back <input type="checkbox"/> Reenter to complete <input type="checkbox"/> * Multiple complete <input type="checkbox"/> * Recomplete <input type="checkbox"/> * Data correction <input type="checkbox"/> Change plans <input checked="" type="checkbox"/> Request approval <input checked="" type="checkbox"/> Subsequent report <input type="checkbox"/> Note: Submit a separate Well (Re) Completion Report and a subsequent report of operations on this form for each completion. Alternatively, submit a Well (Re) Completion Report for each completion with a narrative as in item 23 of this form.			
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OCS D-1597-1

OCT 26 1991

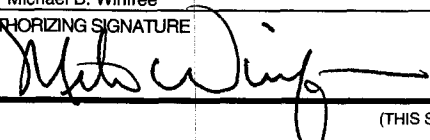
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)

SUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

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CONTACT NAME (First, MI, Last)	PHONE NUMBER (10)	EXTENSION NUMBER (4)
Tim Billingsley	(907) 265-6575	
AUTHORIZING NAME (First, MI, Last)	TITLE	
Michael B. Winfree	New Ventures Area Drilling Engineer	
AUTHORIZING SIGNATURE	DATE YYMMDD (6)	
	93 10 22	

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

ARE ATTACHED ☐NONE ☐

DATE (6)

YYMMDD

☒ APPROVED BY:☐ ACCEPTED BY:

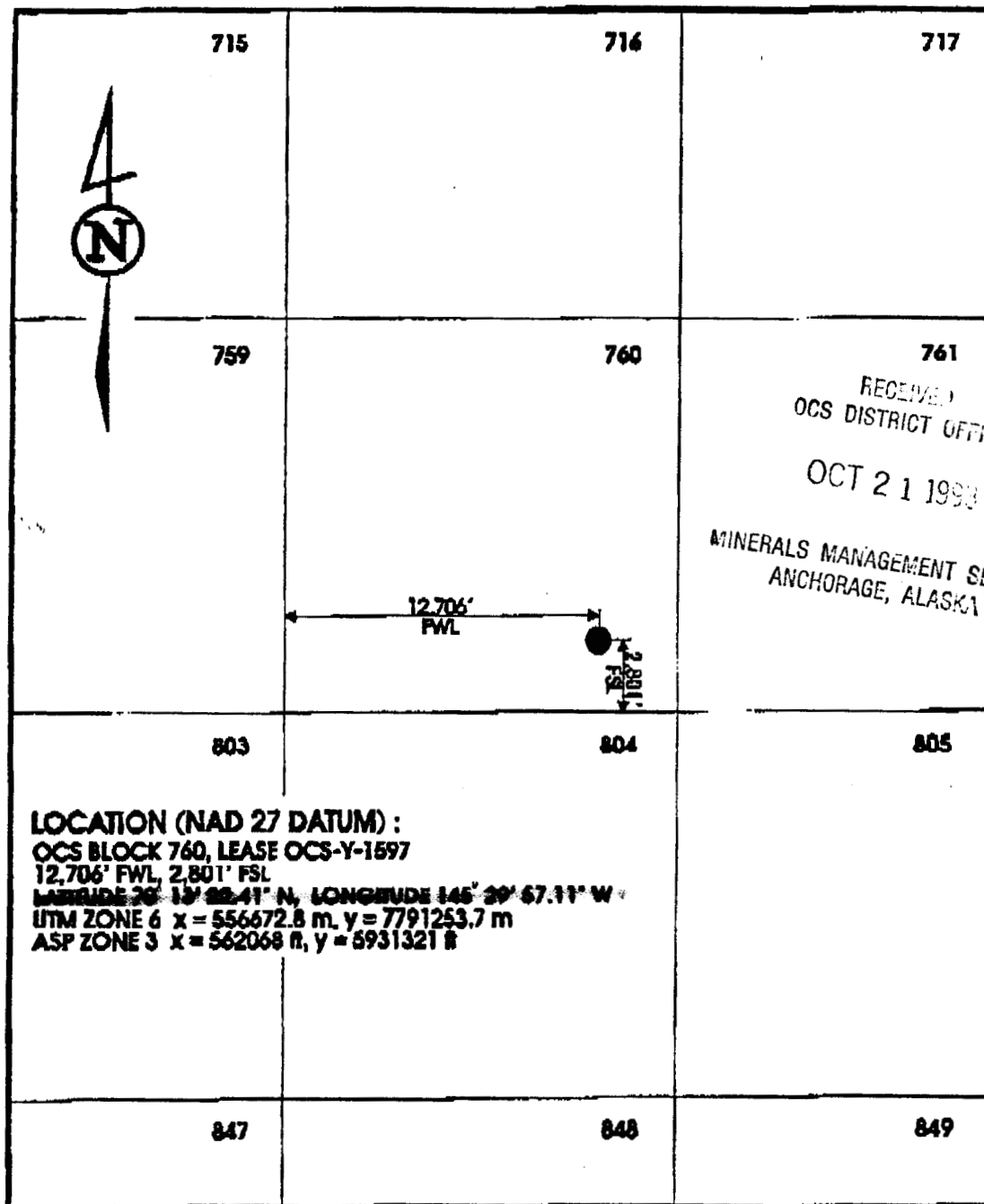
TITLE

District Supervisor 931025

PAPERWORK REDUCTION ACT STATEMENT

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that: This information is being collected to obtain knowledge of the equipment and procedures to be used during well-completion, workover, and production operations. This information will be used by the District Supervisor to evaluate and approve or disapprove the adequacy of the equipment and procedures to safely perform the proposed operations. Response to this request is mandatory (43 U.S.C. 1334).

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I, GEOFF WRIGHT, REGISTERED CANADA LAND SURVEYOR, HEREBY CERTIFY THAT THE SURVEY SHOWN BY THIS PLAN WAS CORRECTLY EXECUTED, AND THAT SAID PLAN IS CORRECT AND TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

OCTOBER 19, 1993

GEOFF WRIGHT, C.L.S. #1343

ARCO Y-1597 #1
BLOCK 760, NR 6-4
FINAL WELL POSITION

Public Information

SUNDRY NOTICES AND REPORTS ON WELLS

1. FIELD NAME Wildcat		2. MMS LEASE, UNIT OR COMM. NO. (6) Y 1597 0		3. MMS OPERATOR NUMBER (5) 0635													
4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1		5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011		7. CORRECTED ELEVATION (5) 65' RKB-MSL													
8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360		9. CURRENT WELL DEPTH (5) MD 1000' TVD 1000' LEAVE BLANK		10. CORRECTED WATER DEPTH (5) 87'													
11. CORRECTED LOCATION OF WELL (12) Surface: 2801' FSL and 3134' FEL (12,706' FWL) of Block 760 Production zone: NA Total depth: NA				12. OPERATING AREA CODE (2) FI													
				13. BLOCK NUMBER (6) 0760													
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17. RIG TYPE (2) SS																	
18. WELL STATUS, e.g., shut-in, drilling, etc. Drilling		19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) 20", 133 lb/ft, X-56 @ 1000'		20. APPROXIMATE START DATE (6) YYMMDD 93 10 13													
21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA																	
22. CHECK APPROPRIATE ACTIVITY:																	
Data correction <input type="checkbox"/> Change plans <input type="checkbox"/> Request approval <input type="checkbox"/> Subsequent report <input checked="" type="checkbox"/>		<table style="width:100%;"> <tr> <td>Fracture/acidize <input type="checkbox"/></td> <td>Artificial Lift <input type="checkbox"/></td> <td>Other <input checked="" type="checkbox"/></td> </tr> <tr> <td>Pull or alter casing <input type="checkbox"/></td> <td>Repair well <input type="checkbox"/></td> <td>Perforate <input type="checkbox"/></td> </tr> <tr> <td>Sidetrack <input type="checkbox"/></td> <td>Deepen <input type="checkbox"/></td> <td>Plug back <input type="checkbox"/></td> </tr> <tr> <td>Reenter to complete <input type="checkbox"/>*</td> <td>Multiple complete <input type="checkbox"/>*</td> <td>Recomplete <input type="checkbox"/>*</td> </tr> </table>				Fracture/acidize <input type="checkbox"/>	Artificial Lift <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Pull or alter casing <input type="checkbox"/>	Repair well <input type="checkbox"/>	Perforate <input type="checkbox"/>	Sidetrack <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug back <input type="checkbox"/>	Reenter to complete <input type="checkbox"/> *	Multiple complete <input type="checkbox"/> *	Recomplete <input type="checkbox"/> *
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<p>RECEIVED OCS DISTRICT OFFICE OCT 26 1990 MINERALS MANAGEMENT SERVICE ANCHORAGE, ALASKA</p>																	

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)

SUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

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CONTACT NAME (First, MI, Last)

Tim Billingsley

PHONE NUMBER (10)

(907) 265-6575

EXTENSION NUMBER (4)

AUTHORIZING NAME (First, MI, Last)

Michael B. Wintree

TITLE

New Ventures Area Drilling Engineer

AUTHORIZING SIGNATURE

DATE YYMMDD (6)

93 10 20

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

ARE ATTACHED ☐NONE ☐

DATE (6)

YYMMDD

☒ APPROVED BY: ☐ ACCEPTED BY: _____

TITLE

DISTRICT SUPERVISOR 93 10 25

PAPERWORK REDUCTION ACT STATEMENT

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4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1		5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011		SIDE TRACK (2) NA	COMPLETION CODE (3) E	6. TYPE WELL (1) E
7. CORRECTED ELEVATION (5) 65' RKB-MSL		8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360				
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14. MAP OR OFFICIAL PROTRACTION DIAGRAM NUMBER (7) NR 6-4, Flaxman Island						
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME Kuvlum			16. RIG/PLATFORM NAME BeauDril - Kultuk		17. RIG TYPE (2) SS	
18. WELL STATUS, e.g., shut-in, drilling, etc. Drilling		19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) 20", 133 lb/ft, X-56 @ 1000'			20. APPROXIMATE START DATE (6) YYMMDD 93 10 13	
21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA						
22. CHECK APPROPRIATE ACTIVITY:						
Data correction <input type="checkbox"/>		Fracture/acidize <input type="checkbox"/>		Artificial Lift <input type="checkbox"/>		Other <input checked="" type="checkbox"/>
Change plans <input type="checkbox"/>		Pull or alter casing <input type="checkbox"/>		Repair well <input type="checkbox"/>		Perforate <input type="checkbox"/>
Request approval <input type="checkbox"/>		Sidetrack <input type="checkbox"/>		Deepen <input type="checkbox"/>		Plug back <input type="checkbox"/>
Subsequent report <input checked="" type="checkbox"/>		Reenter to complete <input type="checkbox"/> *		Multiple complete <input type="checkbox"/> *		Recomplete <input type="checkbox"/> *
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<p>1 Actual water depth for OCS-Y-1597 #1 = 87', RKB TO ML= 152'</p> <p>2 Actual location for OCS-Y-Q597 #1 2801' FSL and 3134' FEL (12,706" FWL) of Block 760</p> <p>3 Well was spudded @ 09:00 hrs 10/13/93.</p> <p>4 30" structural casing was installation was completed 00:30 hrs 10/14/93. 30" casing detail attached.</p> <p>5 20" conductor casing installed 10/16-17/93. CIP @ 05:46 hrs 10/17/93. Casing was cemented with 2876 sx (2675 cu ft) of Arctic Set I @ 15.7 ppg w/ 0.3% D-13. Cement returns to Glory Hole were confirmed with airlift samples to surface. 20" casing detail attached.</p> <p>6 A formation leak-off test was performed after drilling 10' of new formation below the 20 " casing. A 15.0 ppg EMW test was obtained. Details of LOT are attached.</p>						

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OCT 20 1993

MMS - MINERALS MANAGEMENT SERVICE

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)

OCS DISTRICT OFFICE

OCT 26 1993

MINERALS MANAGEMENT SERVICE
SUNRISE VALLEY, ALASKASUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

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CONTACT NAME (First, MI, Last)

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EXTENSION NUMBER (4)

AUTHORIZING NAME (First, MI, Last)

Michael B. Wintree

TITLE

New Ventures Area Drilling Engineer

AUTHORIZING SIGNATURE

DATE YYMMDD (6)

93 10 20

(THIS SPACE IS FOR FEDERAL OFFICE USE)

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ARE ATTACHED ☐NONE ☐

DATE (6)

YYMMDD

☒ APPROVED BY: _____☐ ACCEPTED BY: _____

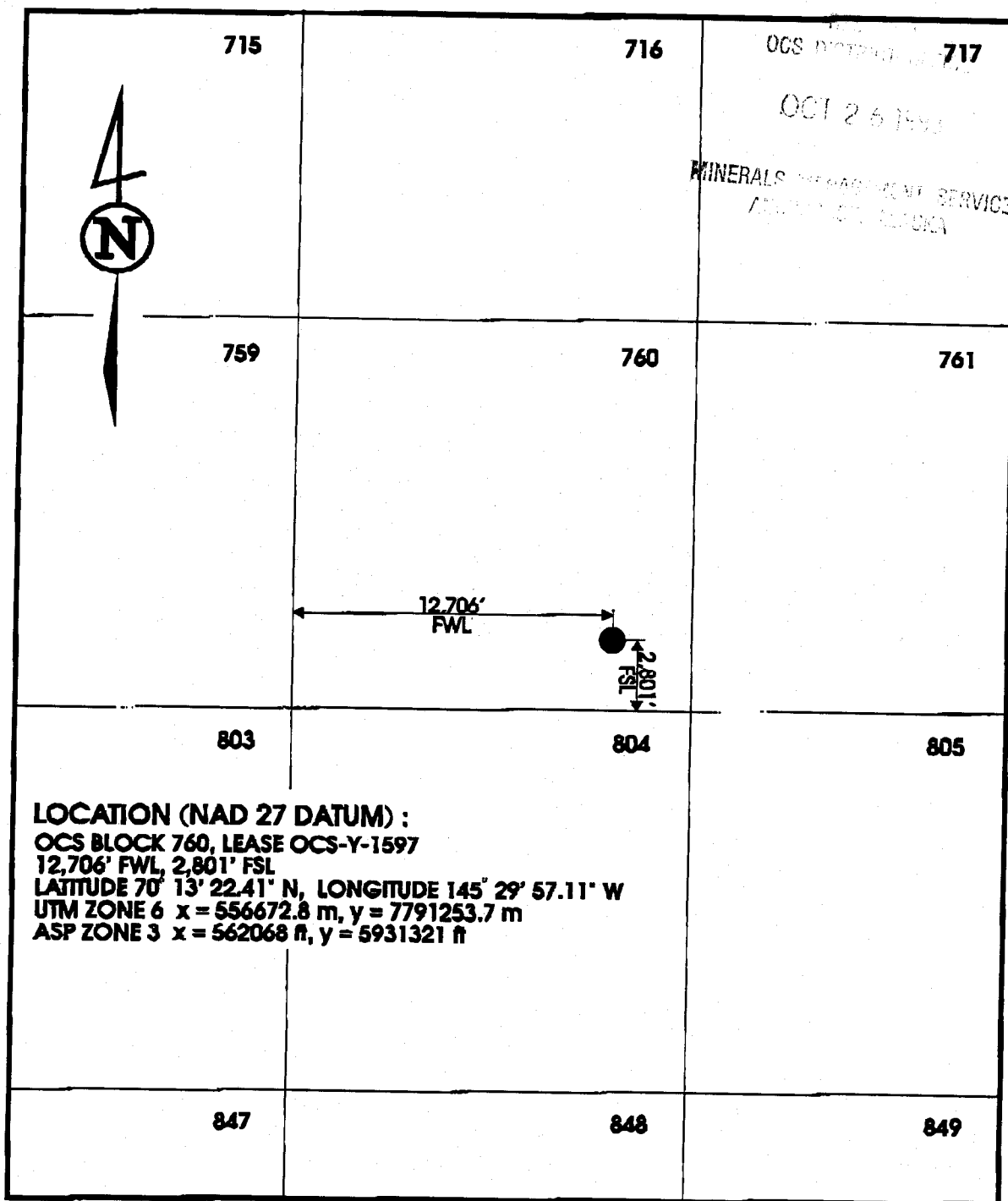
TITLE

District Supervisor 93 10 25

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I, GEOFF WRIGHT, REGISTERED CANADA LANDS
SURVEYOR, HEREBY CERTIFY THAT THE SURVEY
SHOWN BY THIS PLAN WAS CORRECTLY EXECUTED,
AND THAT SAID PLAN IS CORRECT AND TRUE TO
THE BEST OF MY KNOWLEDGE AND BELIEF.

OCTOBER 19, 1993

GEOFF WRIGHT, C.L.S. #1343

ARCO Y-1597 #1
BLOCK 760, NR 6-4
FINAL WELL POSITION



NORTECH ATLANTIC LTD.

ANCHOR PATTERN

for

ARCO-Y-1597 # 1

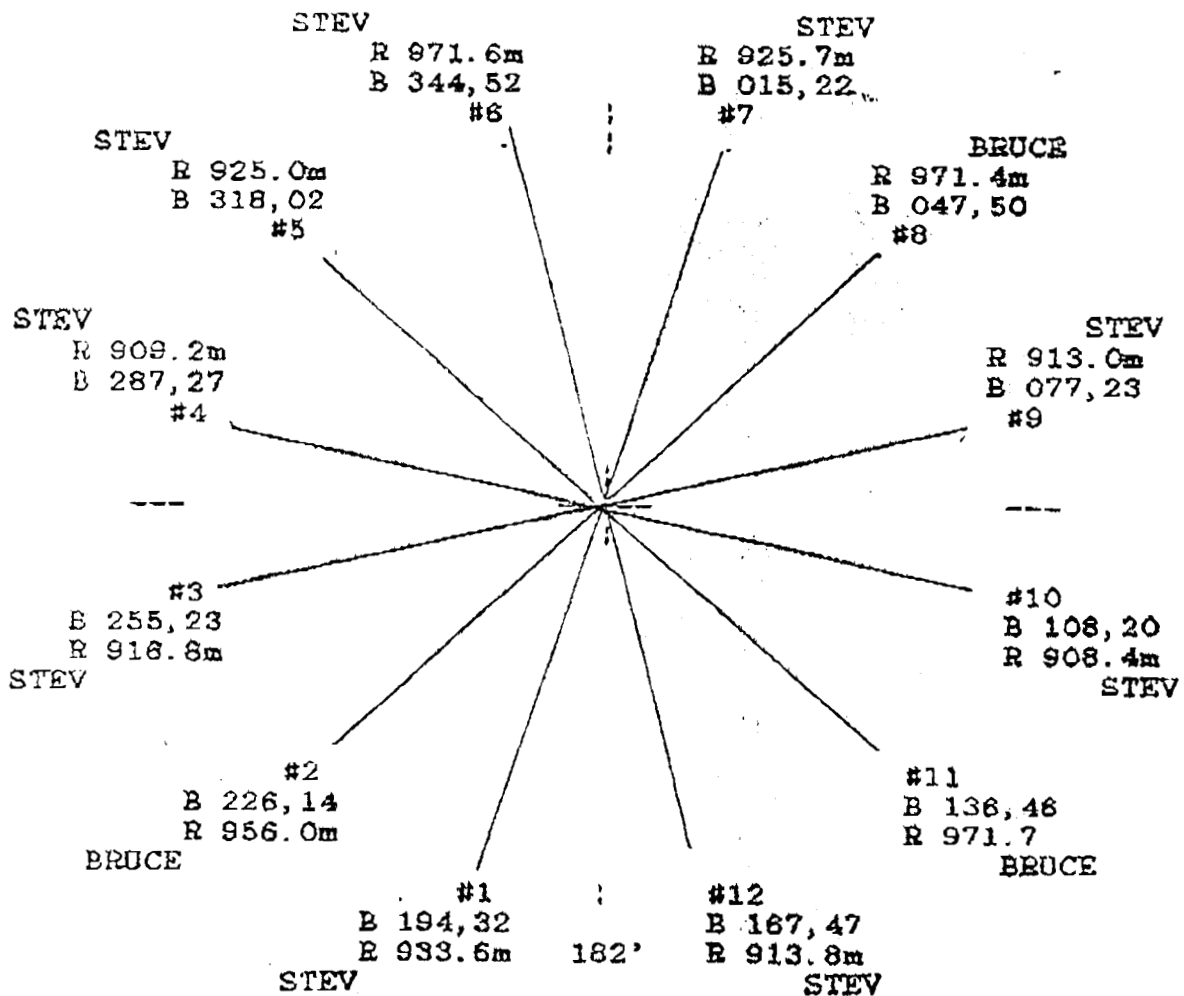
12 POINT MOORING

008 0000 0000

OCT 2 8 1993

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

STERN HEADING



Submitted by: Dave Watson Oct. 7, 1993.

Dave Watson



	CASING / TUBING / LINER DETAIL		
	ARCO ALASKA / Subsidiary of Atlantic Richfield	WELL:	Y-1597#1
		DATE:	10/15/93
		PAGE:	1
# ITEMS	COMPLETE DESCRIPTION OF EQUIPMENT RUN	LENGTH	DEPTH
	Y-1597 #1 30" 1.5" WT		TOPS
	RT TO TOP OF 30" WHH	185.90	0.00
1	30" WHH AND PGB	2.10	185.90
1	30", 1.5" WT, X-52, DB-60/MT CSG (Attached to PBG for drill-in)	38.39	188.00
1	30", 1.5" WT, X-52, DB-60/MT CSG	41.12	226.39
1	(CUT JT) 30", 1.5" WT, X-52, DB-60/MT CSG	26.89	267.51
	30" CASING SHOE @		294.40
	30" DRILLED INTO PLACE AND POSITIONED WITH BOTTOM OF DRILQUIP P.G.B. 4' ABOVE BOTTOM OF GLORY HOLE. GLORY HOLE WAS DRILLED TO 192' (RT).		
RAN:			
	Supervisor: Bumgarner/Morrison/Hill		
	Page 1		

# ITEMS	COMPLETE DESCRIPTION OF EQUIPMENT RUN	LENGTH	DEPTH
	Y-1597 #1 20" 133# X-56 Csg (S-60 Connections)		TOPS
	RT TO TOP OF 18-3/4" WHH	183.48	0.00
1	WHH, HANGER AND PUP JT.	26.40	183.48
1	20" X/O JT. HD-90 PIN x S-60 PIN	6.40	209.88
19	20", 133#, X-56, S-60	780.23	216.28
1	DAVIS LYNCH DV DOWN JET SHOE	3.35	996.51
	20" CASING SHOE @		999.86
	26" TD @ 1020' - LEAVES 20.14' OF RATHOLE BENEATH 20"	20.14	1020.00
RAN:	20 FS, 19 JTS 20" (133#, X-56 CSG (S-60 CONN)), 20" X/O, 18-3/4" WHH 20" CSG LANDS W/ TOP OF 18-3/4" WHH 2.52' STICK-UP ABOVE 30" WH		
	Supervisor: Bumgarner/Morrison/Hill		

Page 1

OCS DISTRICT 11-101
OCT 26 1960

MINERAL SERVICE
NICHOLAI, ALASKA

"Y-1597 #1, 20" Leak-off Test

WELL: Y-1597 #1

DATE/TIME: 0600 10/20/93

SUPERVISOR: CAMPBELL/SCHULTZ

RIG: CDU KULLUK

MUD WEIGHT = 9.6 ppg = MW

TRUE VERTICAL DEPTH = 1030 FEET = TVD

HYDROSTATIC HEAD1 (HH 1) = $0.052 \times \text{TVD} \times \text{MW} = 514 \text{ psi}$

Leak-off test pressure taken from graph @ 290 psi with 1.5 barrels pumped.

Leak-off EMW = $((0.052 \times \text{TVD} \times \text{MW}) + (\text{Surface press})) / (\text{TVD} \times 0.052) = 804 / (1030 \times 0.052)$

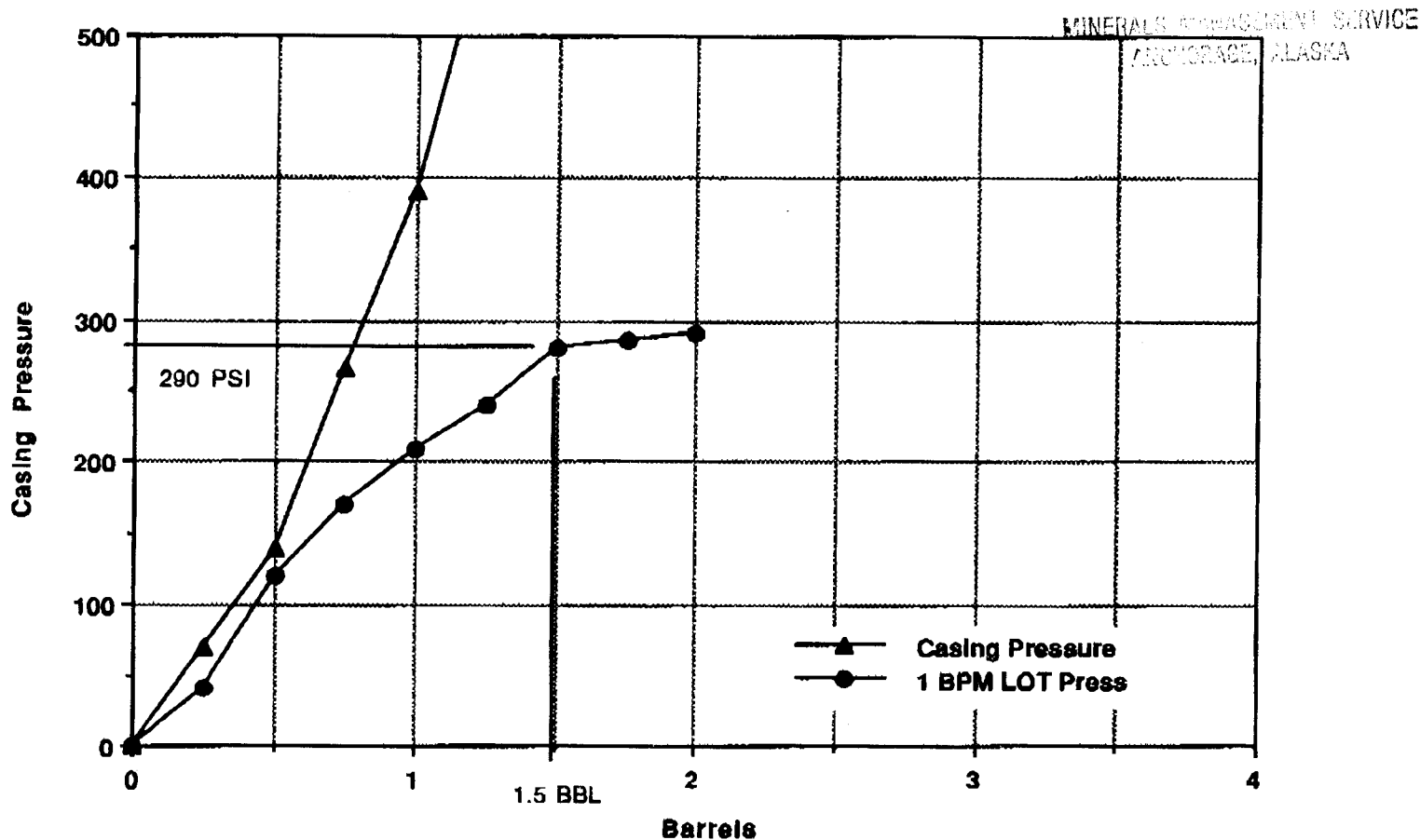
Leak-off EMW = 15.0 ppg

Both casing and leak-off test pressures taken @ 1 BPM using Dowell unit.

Held press for 5 mins. Formation leaked off - bled off from 290 psi to 210 psi in 5 min.

RECEIVED
OCS DISTRICT OFFICE

OCT 26 1993

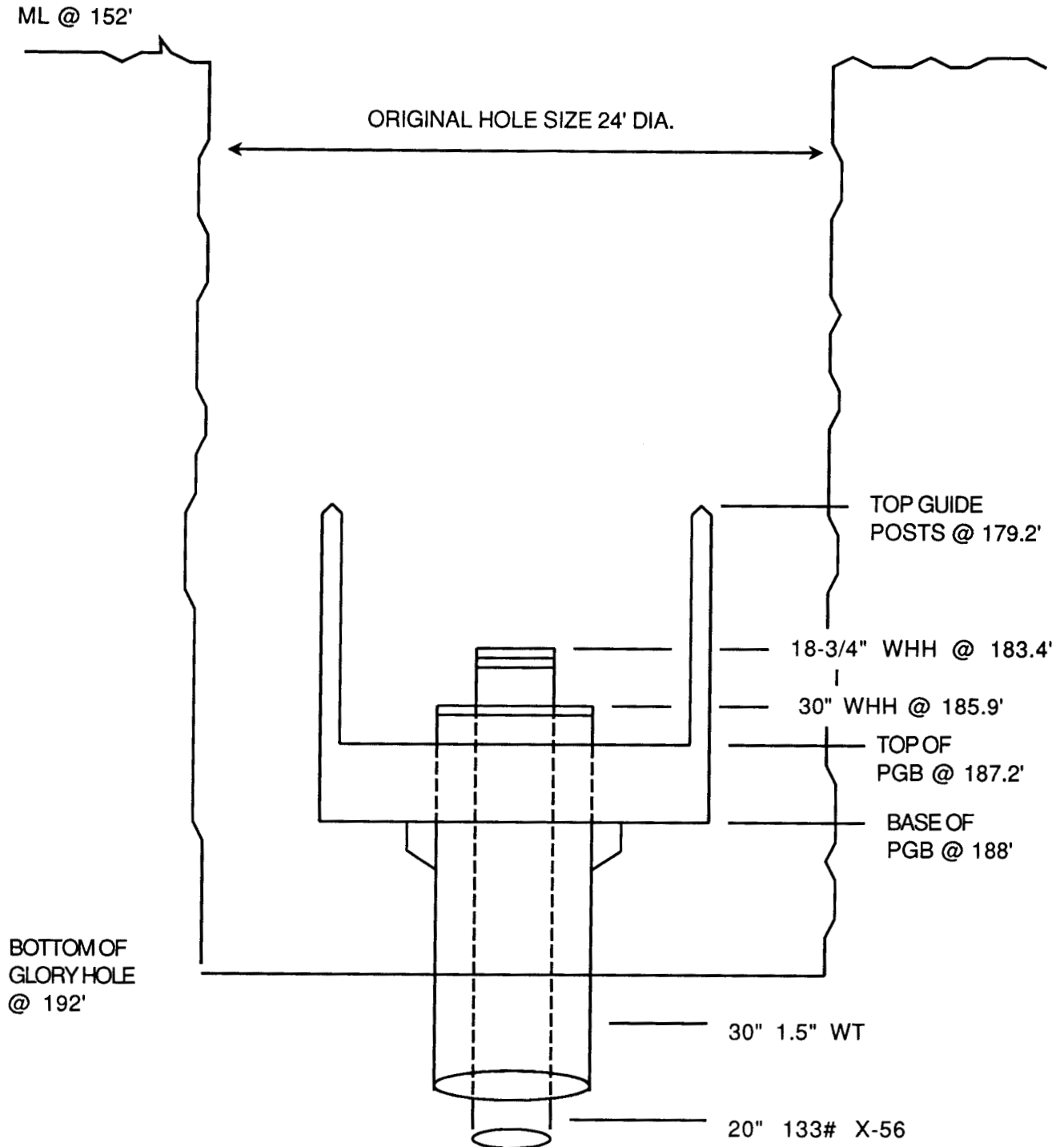
Pressure Profiles

Y-1597 #1
GLORY HOLE DIAGRAM

ENGINEERING
OCS DISTRICT OFFICE

OCT 26 1986

MINERAL & FUEL SERVICE
ALASKA DEPARTMENT OF REVENUE



NOTE: ALL DEPTHS ARE FROM ROTARY TABLE (RT)

GLA 10/18/93

SUNDRY NOTICES AND REPORTS ON WELLS

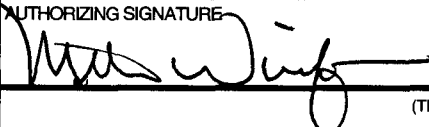
1. FIELD NAME Wildcat		2. MMS LEASE, UNIT OR COMM. NO. (6) Y 1597 0		3. MMS OPERATOR NUMBER (5) 0635	
4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1		5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011		6. TYPE WELL (1) NA E	
8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360		9. CURRENT WELL DEPTH (5) MD 3860' TVD 3860' LEAVE BLANK		7. CORRECTED ELEVATION (5) 66' RKB-MSL est	
11. CORRECTED LOCATION OF WELL (12) Surface: 2801' FSL and 3134' FEL of Block 760 planned Production zone: NA Total depth: NA		12. OPERATING AREA CODE (2) FI		13. BLOCK NUMBER (6) 0760	
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME Kuvlum		16. RIG/PLATFORM NAME BeauDril - Kulluk		14. MAP OR OFFICIAL PROTRACTION DIAGRAM NUMBER (7) NR 6-4, Flaxman Island	
18. WELL STATUS, e.g., shut-in, drilling, etc. Circulating at 3860'		19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) 20", 133 lb/ft, X-56 set at 1000'		17. RIG TYPE (2) SS	
20. APPROXIMATE START DATE (6) YYMMDD 93 10 13		21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA			
22. CHECK APPROPRIATE ACTIVITY: Data correction <input type="checkbox"/> Change plans <input checked="" type="checkbox"/> Request approval <input checked="" type="checkbox"/> Subsequent report <input type="checkbox"/>		Fracture/acidize <input type="checkbox"/> Pull or alter casing <input type="checkbox"/> Sidetrack <input type="checkbox"/> Reenter to complete <input type="checkbox"/> * Artificial Lift <input type="checkbox"/> Repair well <input type="checkbox"/> Deepen <input type="checkbox"/> Multiple complete <input type="checkbox"/> * Other <input checked="" type="checkbox"/> Perforate <input type="checkbox"/> Plug back <input type="checkbox"/> Recomplete <input type="checkbox"/> * Note: Submit a separate Well (Re) Completion Report and a subsequent report of operations on this form for each completion. Alternatively, submit a Well (Re) Completion Report for each completion with a narrative as in item 23 of this form.			
23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details in this space and on the reverse, and/or on an attachment, and give pertinent dates, including estimated date for starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work. 1 Waiver is requested to eliminate the open hole wireline logs from the surface hole interval ($\pm 4000'$ to $\pm 1000'$). Open hole wireline logs are being eliminated because there are no zones of interest and 1-3 days of rig time can be saved. MWD logs have been obtained in this interval (gamma ray and resistivity)					

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)

SUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

WARNING: PUBLIC LAW 97-451 provides civil and criminal penalties for false or inaccurate reporting. Failure to report as required under the terms of the lease, permit, or contract may result in suspension of operations or other enforcement actions.

CONTACT NAME (First, MI, Last)	PHONE NUMBER (10)	EXTENSION NUMBER (4)
Tim Billingsley	(907) 265-6575	
AUTHORIZING NAME (First, MI, Last)	TITLE	
Michael B. Winfree	New Ventures Area Drilling Engineer	
AUTHORIZING SIGNATURE	DATE YYMMDD (6)	
	93 10 22	

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

ARE ATTACHED ☐NONE ☐DATE (6)
YYMMDD☒ APPROVED BY:☐ ACCEPTED BY:

TITLE

District Supervisor 931025

PAPERWORK REDUCTION ACT STATEMENT

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that: This information is being collected to obtain knowledge of the equipment and procedures to be used during well-completion, workover, and production operations. This information will be used by the District Supervisor to evaluate and approve or disapprove the adequacy of the equipment and procedures to safely perform the proposed operations. Response to this request is mandatory (43 U.S.C. 1334).

Public reporting burden for this form is estimated to average 1/2 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 631, Minerals Management Service, 12203 Sunrise Valley Drive, Reston, VA 22091; and Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

MINERAL

AND

Public Information

SUNDRY NOTICES AND REPORTS ON WELLS

1. FIELD NAME Wildcat			2. MMS LEASE, UNIT OR COMM. NO. (6) Y 1597 0		3. MMS OPERATOR NUMBER (5) 0635														
4. OPERATOR WELL NUMBER (6) OCS-Y-1597 #1		5. API NUMBER (10) or (12) STATE (2) COUNTY (3) WELL CODE (5) 55 171 00011		6. TYPE WELL (1) E		7. CORRECTED ELEVATION (5) 65' RKB-MSL													
8. OPERATOR NAME AND ADDRESS (SUBMITTING OFFICE) ARCO Alaska, Inc. PO Box 100360 Anchorage, AK 99510-0360				9. CURRENT WELL DEPTH (5) ** MD 4600' TVD 4600'		10. CORRECTED WATER DEPTH (5) 87'													
				LEAVE BLANK															
11. CORRECTED LOCATION OF WELL (12) Surface: 2801' FSL and 3134' FEL (12,706' FWL) of Block 760 Production zone: NA Total depth: NA				12. OPERATING AREA CODE (2) FI		13. BLOCK NUMBER (6) 0760													
				14. MAP OR OFFICIAL PROTRACTOR DIAGRAM NUMBER (7) NR 6-4, Flaxman Island															
15. OPERATOR LEASE, UNIT OR COMMUNITIZATION NAME Kuvlum				16. RIG/PLATFORM NAME Canmar - Kulluk		17. RIG TYPE (2) SS													
18. WELL STATUS, e.g., shut-in, drilling, etc. Drilling		19. LAST CASING STRING: size, lb/ft, grade, and setting depth (MD) 13-3/8", 68 lb/ft, L-80, BTC set at 3829'			20. APPROXIMATE START DATE (6) YYMMDD 93 10 13														
21. PRESENT PRODUCTION ZONE, IF ANY, AND PRODUCTIVE CAPABILITY NA																			
22. CHECK APPROPRIATE ACTIVITY:		<table border="0" style="width:100%;"> <tr> <td>Fracture/acidize <input type="checkbox"/></td> <td>Artificial Lift <input type="checkbox"/></td> <td>Other <input checked="" type="checkbox"/></td> </tr> <tr> <td>Pull or alter casing <input type="checkbox"/></td> <td>Repair well <input type="checkbox"/></td> <td>Perforate <input type="checkbox"/></td> </tr> <tr> <td>Sidetrack <input type="checkbox"/></td> <td>Deepen <input type="checkbox"/></td> <td>Plug back <input type="checkbox"/></td> </tr> <tr> <td>Reenter to complete <input type="checkbox"/>*</td> <td>Multiple complete <input type="checkbox"/>*</td> <td>Recomplete <input type="checkbox"/>*</td> </tr> </table>						Fracture/acidize <input type="checkbox"/>	Artificial Lift <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Pull or alter casing <input type="checkbox"/>	Repair well <input type="checkbox"/>	Perforate <input type="checkbox"/>	Sidetrack <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug back <input type="checkbox"/>	Reenter to complete <input type="checkbox"/> *	Multiple complete <input type="checkbox"/> *	Recomplete <input type="checkbox"/> *
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OCS DISTRICT OFFICE

OCT 28 1993

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

23. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (continued from page 1)


RECEIVED
MMS DISTRICT OFFICE

OCT 28 1993

MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKASUBSURFACE SAFETY VALVE: SUBSURFACE CONTROLLED ☐ SURFACE CONTROLLED ☐ SET AT DEPTH OF _____

MANUFACTURER: _____ MODEL NO. _____ SERIAL NO. _____

WARNING: PUBLIC LAW 97-451 provides civil and criminal penalties for false or inaccurate reporting. Failure to report as required under the terms of the lease, permit, or contract may result in suspension of operations or other enforcement actions.

CONTACT NAME (First, MI, Last) Tim Billingsley	PHONE NUMBER (10) (907) 265-6575	EXTENSION NUMBER (4)
AUTHORIZING NAME (First, MI, Last) Michael B. Winfree	TITLE New Ventures Area Drilling Engineer	
AUTHORIZING SIGNATURE 	DATE YYMMDD (6) 93 10 25	

(THIS SPACE IS FOR FEDERAL OFFICE USE)

CONDITIONS OF APPROVAL FOR SPECIAL CIRCUMSTANCES:

ARE ATTACHED ☐NONE ☐

DATE (6)

YYMMDD

☒ APPROVED BY: ☐ ACCEPTED BY: _____

TITLE

DISTRICT SUPERVISOR 93/10/26

PAPERWORK REDUCTION ACT STATEMENT

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