

STATE OF ALASKA 34078 DEPARTMENT OF NATURAL RESOURCES DIVISION OF MINING, LAND & WATER Alaska Hydrologic Survey

WATER WELL LOG Revised 08/18/2016

Drilling Start	ed://	Compl	eted: <u>3 / 29 / 2010</u> Pump Install://
City/Borough	Subdivision	Block	Lot Property Owner Name & Address
North Slope Borough			ENI PETROLEUM,
Well location: Latitude 70		0	
Meridian U Towns		Section	n <u>19</u> , <u>SE</u> 1/4 of <u>SE</u> 1/4 of <u>NW</u> 1/4 of <u>NE</u> 1/4
BOREHOLE DATA: (from Suggest T.M. Hanna's hydrog		otom*	Drilling method: Air rotary, Cable tool, Other
https://my.ngwa.org/NCProd			Well use: Public supply, Domestic, Reinjection, Hydrofracking
		epth	Commercial, Observation/Monitoring, Test/Exploratory, Cooling,
	From	<u>To</u>	☐ Irrigation/Agriculture, ☐Grounding, ☐Recharge/Aquifer Storage,
			Heating, Geothermal Exploration, Other
			Fluids used:
			Depth of hole: <u>74</u> ft Casing stickup:ft
			Casing type: Casing thickness: inches Casing diameter: inches Casing depth: ft
			Liner type: Depth: ft Diameter:inches
			Note:
			Well intake opening type: Open end, Open hole, Other screened
			Screen type:, Screen mesh size:
			Screen start: ft, Screen stop: ft, Perforated Yes I No
			Perforation description: Perf from: ft, Perf
			to:ft, Perf from: ft, Perf to: ft
			Gravel packed Yes INo Gravel start: ft , Gravel stop: ft
			Note:
			Static water (from top of casing): <u>26</u> ft on / / Artesian well
			Pumping level & yield: feet after hours at <u>49</u> gpm
			Method of testing: Development method: Duration:
			Recovery rate: gpm
			Grout type: Volume
			ft, Toft
Include description or sketch of buildings, etc.):	f well location (include road	d names,	Final pump intake depth: ft Model:
			Pump size: hp Brand name:
			Was well disinfected upon completion? Yes INO
			Method of disinfection:
			Was water quality tested? Yes No
			Water quality parameters tested:
			Well driller name: WATNE WESTBERG
			Company name: M-W DRILLING Mailing address: PO BOX 110378
		•	City: <u>ANCHORAGE</u> State: <u>AK</u> Zip: <u>99511</u>
		Noth	Phone number: (907) 945 3287
AS 41.08.020(b)(4) and AAC 11 AAC 93.140(a) require that a			Driller's signature:
copy of the well log be submitt			-
Resources within 45 days of well completion . Well logs may be submitted using the online well log reporting system available at:			Date:// Anchorage Municipal Code 15.55.060(I) and North Pole Ordinance 13.32.030(D) require
			that a copy of this well log be submitted to the Development Services Department/City
https://dnr.alaska.gov/welts/			within 30 days of well completion.
OR email electronic well logs to			City Permit Number: Date of Issue:/
dnr.water.reports@alaska.gov			Parcel Identification Number:

*Guide for Using the Hydrogeologic Classification System for Logging Water Well Boreholes by Thomas M. Hanna NGWA Press

M-W Drilling, Inc.

◆P.O. Box 110389 ◆ Anchorage, AK 99511 ◆
◆907-345-4000 ◆ 907-345-3287 Fax ◆

Job No. 10-104

GROUNDWATER WELL AS-BUILT & LOG

Well Owner:	ENI Petroleum	Use of Well:	Public
Legal Description:	Spy Island Drill Site - Water Well No. 2 (SID 2)		

CONSTRUCTION

Drill Method:	Air Rotary with cas	ing hammer			Hole Size & Depth:	104'
Casing Size:	8 5/8	Cased to:	90.35	Material:	A 53 Steel GR B	Wall: 0.250"
	14"	· _	29.77'		A 53 Steel GR B	Wall: 0.375"
Well Completic		Scree		Perforate		
Screen descrip	tion: K packer &	riser 85.5 to 9	0.5: 0.04	0" slot 3165	SS to 101; tail & plate t	to 102'
Grout Notes:	(3) Sack(s) of Be	ntonite granul	es outsid	e of 14" surfa	ce casing	
Well Developm	ent: Air Surge – :	screen filled w	/sand du	ring test pum	p - redeveloped until n	io sand production
Well Disinfecte	iđ: N	Method:				
Yield test at	48.6 GPM for	24	nour(s) w	th 5.23	of drawdown (DD) fr	om static level(SWL).
Method: Sub	mersible	Static Wa	ater Leve	(SWL): 26		
Start Date:	3/25/10			ompletion Dat		· · · · _ · _ ·
Test Pump Dat	e: <u>3/29/10</u>			mp Install Dat		

WELL LOG (Well drilled on 45° slant)

	in feet f of casin	from top g.	Details of formations penetrated, size of material, color and miscellaneous details.
0	TO	4	Casing Stick Up
4	TO	26	Sandy gravel
26	TO	35	Small gravel: gray black, sandy/silty, damp
35	TO	44	Small gravel: wet
44	TO	75	Muck: black, silty organics, wet minor pea gravel
75	то	81	Small gravel: black, silty muck, wet & runny
81	то	93	Water gravel: brown, silty – dirty, heaving
93	TO	101	Water gravel: gray black, med to coarse, sandy, slightly
	TO		silty – cleaner than above
101	TO	104	Sand: black, gravelly, silty, water bearing, clean
	TO		
	то		
	TO		WAYNE E. WESTBERG
	TO		President, M-W Drilling, Inc. NGWA Certified Master Groundwater Contractor
	TO		Ak Gen Contr Lic No 1000
	то		Note: recommend final pump install at 60' max.