



2938053

Certificate of Inspection

NUSCO PIPE & SUPPLY LTD.
BOX 156
NISKU, ALBERTA

TOC 2GO

RECEIVED APR 14 1994

LOCATION: ~~STOCK~~ 6-14-88-13 W6M
COMPANY CODE:

DESCRIPTION: VERTICAL SEPARATOR

PREFERRED RE-INSP. INTERVAL: .00 YRS
CRN: K9276.21

MANUFACTURER: NUSCO MANUFACTURING & SUPPLY LTD.

SERIAL # : 30021-204

YEAR BUILT: 1993

HEATING SURFACE:

m2

CUBICAL CAPACITY:

0.210 m3

PART	MAX. AUTHORIZED PRESSURE	MIN. TEMP	ID/LOCATION	SAFETY VALVES SET/CAPACITY	AT TEMP
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SEPARATOR

9928 kPa

37 C SVL
-29 C TO BE INSTALLED

0 kPa
0

*** BOILER OR PRESSURE VESSEL NOT SUBJECT TO ANNUAL REGISTRATION FEES

OWNER INSTRUCTIONS/REMARKS:

NO FURTHER INSPECTION REQUIRED BY ALBERTA BOILER & PRESSURE VESSEL SAFETY
OWNER TO VERIFY INTEGRITY OF VESSEL BY PERIODIC INSPECTION PROGRAM.
VERIFY THAT VESSEL IS PROTECTED BY A 'UV' SAFETY RELIEF VALVE, OF ADEQUATE CAPACITY, SET AT NO MORE THAN MAXIMUM PRESSURE AUTHORIZED, HAS BEEN INSTALLED IN ACCORDANCE WITH THE REGULATIONS.
TO BE INSTALLED IN ACCORDANCE WITH THE BOILERS & PRESSURE VESSEL ACT & REGULATIONS

INSPECTOR: SIMPSON, NORMIN

SIGNATURE: *N. Simpson*

NOTE: REQUIREMENTS OF THE BOILERS AND PRESSURE VESSELS ACT AND THE REGULATIONS ISSUED THEREUNDER:

THE OWNER OR PERSON IN CHARGE SHALL REPORT ALL ACCIDENTS INVOLVING A BOILER, PRESSURE VESSEL OR PRESSURE PIPING SYSTEM TO THE DISTRICT INSPECTOR IMMEDIATELY AND SHALL SEND A FULL REPORT IN WRITING TO THE CHIEF INSPECTOR AS REQUIRED BY THE ACT. NO REPAIRS OR ALTERATIONS MAY BE MADE UNLESS AUTHORIZED BY AN INSPECTOR.

Field Inspection Report

Vessel # 2938053

Client	Canadian Natural Resources Ltd.		Inspection Date	2003/06/20	
Prov. Reg.#	2938053		Insp. Type	VE/UT	
Equipment	Vertical Separator		Location	Clearhills	
Tag/Equip. #			LSD	6-14-88-13W6	
Vessel Status	In Service		Comp./Unit		
Manufacturer	Nusco	Serial #	30021204	MAWP/Temp	1440 psi 100 F
CRN #	K9276.21	Shell Material	SA-106-B	Shell Thick.	1.031 in
Corrosion All.	0.063 in	Head Material	SA-516-70-N	Head Thick.	0.819 in
Manway	No	Head Material 2		Head Thick. 2	in
Coating	No	Channel Material		Channel Thick.	in
Diameter	16 in	Length	in	Height	90 in
Year Built	1993	Next Inspection	2007	RT	2
Service	Sour			Next Insp. Type	VE/UT
				Job #	03-203
PSV #.	5869436				
Mfg.	Taylor	Serial #	5869436	Set Pressure	1440 psi
Type/Model	T82001	Capacity	5180 SCFM	Size	1.000 in
Date of Service	2001/06/20	Next Service	2005	Service Co.	Unified Valve

Observations:

External
 Vessel painted - paint in fair condition, some minor surface corrosion. Vessel secure to skid. Level gauges in good condition. Associated piping in good condition, fully bolted, properly supported, minor corrosion inside building.

Internal
 Not opened for inspection

PSV
 Located on vessel, vented to atmosphere, seal wire intact

AB-40 to be attached

Field Inspection Report

Vessel # 2938053

UT

At random spots, minimum 10 spots each

Measurements in inches

Top Head - 0.838 to 0.923

Shell - 0.987 to 1.039

Bottom Head - 0.832 to 0.912

2" Inlet Elbow - 0.158 to 0.226

2" Outlet Elbow - 0.162 to 0.200

2" Drain Elbow - 0.324 to 0.337

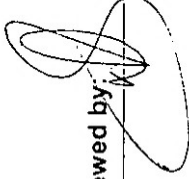
Recommendations:

Vessel fit for service.

Inspector:


Gerry Moran

Reviewed by:



AB-40 to be attached

RAE Inspection Service (1979) Ltd.

#111,4808 - 87 Street, Edmonton, Alberta T6E 5W3

Phone: (780) 469-2401 Fax (780) 468-2422

Date Printed 2001/10/30

Field Inspection Report

Vessel # 2938053

Client	Canadian Natural Resources Ltd.		Inspection Date	2001-10-13	
Prov. Reg.#	2938053		Location	Clearhills	
Equipment	Separator		LSD	6-14-88-13W6	
Tag/Equip. #			Comp./Unit		
Vessel Status	In Operation		Job #	01-540	
Manufacturer	Nusco	Serial #	30021204	MAWP/Temp	1440 psi 100 F
CRN #	K9276.21	Shell Material	SA-106-B	Shell Thick.	1.031 in
Corrosion All.	0.063 in	Head Material	SA-516-70N	Head Thick.	0.819 in
		Head Material 2		Head Thick. 2	in
		Channel Material		Channel Thick.	in
Diameter	16 in	Length	in	Height	84 in
				RT	2
Year Built	1993	Next Inspection	2004	Insp. Type	VE/UT
Service	Sour	Manway	No	Coating	No
PSV #.	5869436				
Mfg.	Taylor	Serial #	5869436	Set Pressure	1440 psi
Type/Model	T82001	Capacity	5180 SCFM	Size	1,000 in
Date of Service	2001-08-01	Next Service	2004	Service Co.	Unified

Observations:

EXTERNAL

Vessel painted, top head and shell above roof. Inside building near roof water condensation noted on shell, paint chips with surface rust noted. Rust stains below nameplate bracket noted. Instruments, gauges, sight glass level indicator, nozzles, nipples and TOLs good. Bottom skirt ring tack-welded to floor plate. No active corrosion noted at this time.

INTERNAL

No access available at time of inspection - operating.

 AB-40 to be attached

Field Inspection Report

Vessel # 2938053

UT

Measurements in inches;

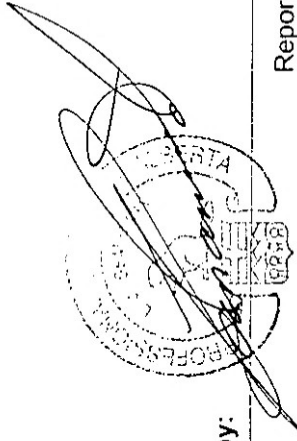
Nominal Shell Thickness: 1.031
Nominal Head Thickness: 0.819

Top Head	0.843 - 0.851
Top Shell	1.031 - 1.043
Middle Shell	1.079 - 1.081
Bottom Shell	1.038 - 1.051
Bottom Head	0.835 - 0.840

3" x 0.600" Inlet Nozzle	0.595 - 0.601
3" x 0.600" Outlet Nozzle	0.577 - 0.611

Recommendations:

No concerns noted at time of inspection.



Inspector: Jim Longstreet

Reviewed by:

AB-40 to be attached

RAE Inspection Service (1979) Ltd.
 #111, 4808 - 87 Street, Edmonton, Alberta T6E 5W3
 Phone: (780) 469-2401 Fax: (780) 468-2422

Field Inspection Report
Vessel A # 2938053

Client	Canadian Natural Resources Ltd.		Date of Insp.	January 12, 2000	
Prov. Reg.#	2938053		Location	Clearhills	
Equipment	Vertical Separator		LSD	6-14-88-13W6	
Tag/Equip. #			Comp./Unit #		
Vessel Status	In Operation		Job #	00-006 B	
Fabricator	Nusco	Serial #	30021204	MAWP/Temp	1440 psi/ 100F
CRN#	K9276.21	Shell Mat'l	SA-106-B	Shell Thick.	1.031"
Corr. All.	0.0625"	Head Mat'l	SA-516-70	Head Thick.	0.819"
Diameter	~18"	Length	Height ~10'	RT	2 HT
Year Built	1993	Next Insp.	2000	Insp. Type	VE
Service	Sour	Manway	No	Coating	
PSV #.					
Mfg.	Taylor	Serial #	69553-37	Set Pressure	1440 psi
Type/Model	T82100-1	Capacity	5181 SCFM	Size	1"
Date of Service	99/07	Next Service	2003	Service Co.	Dalco

Report # 7058

Observations:

External In good condition, slight rust formation.

Recommendations:

Full inspection in 12/2000 (UT and internal).

Inspector: Rex Sadaba

Reviewed By:

