Jurisdiction #: A5735	ON District: K Unit / Skid #: 95 Equip Tag #:	Liard N/A H-500	ARY	nspect Date: Page: IRISNDT #: Field: LSD:	I-K/94-O-05 P-2631-01
CRN #:P0417.3Manufacturer:NWPStatus:In Service -MAWP Shell:AtmosMAWP Tube:4503 PsiMDMT:-20 °FSupport Type:SaddleC.A.:-Component-Shell-Tubes-	Equip Date Rem @ 200 °F Height/L @ 200 °F Size/Dian RT: RT-1 Vo	ment Description: <u>LINE</u> loved F <u>rom Service: N/</u> ength: <u>Unknown</u> neter.: <u>Unkno blume: Unknown</u> Y ⊠ N J.E.: <u>N/A</u> <u>Nominal Thk</u> Dia in.	EHEATER A S	Insulate PWH Manwa ccess: 🗌 D Tube Sid	p: □ Y ⊠ N d: ⊠ Y □ N T: ⊠ Y □ N y: ⊠ Y □ N
- - - <u>Comments:</u> Vessel was dismantled during the isolation from service.	inspection. Firetube was removed. I	nlet & outlet piping were re	moved. Proper blir	nds were installe	ed to ensure
PSV –1 Tag #: PSV-1004 Model #: Unknown Manufacturer: Unknown Inlet Size & Type: 2.00 Outlet Size & Type: 3.00 Carseal Intact: Yes Shell Side / Tube Side: S	Capacity: Unk in Flanged in Flanged	known Si La Block \	CRN Set Pressure ervice Company ast Service Date /alve: Code Stamp Location of PSV	: Muskwa : 5/20/15 : Yes	arator
PSV –2 Tag #: N/A Model #: N/A Manufacturer: N/A Inlet Size & Type: Outlet Size & Type: Carseal Intact: N/A Shell Side / Tube Side:	Serial #: N/A Capacity: N/A	Si La Block \	CRN: Set Pressure ervice Company: ast Service Date /alve: Code Stamp Location of PSV:	: N/A : N/A :	
PSV Comments PSV is located on inlet separator. Static data & service tag were not 5311 - 86 Street, Edmonton, Alberta T6E 5T8 Pf Calgary (403) 279-6121 Lloydminster (780) 875-6455		(780) 826-6105 (780) 743-1536		Engineering, Calgary	(403) 217-9684 n (780) 437-2022



Report #: Inspect Date: Page: IRISNDT #:

d34K-173502-01 30-Oct-15 2 of 10 173502

External Inspection Results - VE External Inspection Performed Item Y N NA Condition Comment NCR Action Item Priority Nameplate Image: Construction and Supports	Client: C	HEV	RON		LSD:	D-34-K/94-O-05	Jurisdiction	#:	\$73595
Nameplate	External Inspection Results	- VE	Exte	rnal Ins	spection Pe	rformed			
Start - 66 Street Skid Level	Item	Y	Ν	N/A	Condition	Comment	NCR	Action Item	Priority
Anchor Bolts Image: Construction of the second form of cable estached Image: Construction of the second form of cable estached Image: Construction of the second form of cable estached Insulation Condition Image: Construction of the cable estached Shell & Heads Image: Construction of the cable estached Aux Equipment Image: Construction of the cable estached Pressure Gauge Image: Construction of the cable estached Pressure Gauge Image: Construction of the cable estached Temperature Gauge Image: Construction of the cable estached Image: Construction of the cable estached <td>Nameplate</td> <td>\square</td> <td></td> <td></td> <td>Accept</td> <td>Coil & firetube data plates</td> <td></td> <td></td> <td></td>	Nameplate	\square			Accept	Coil & firetube data plates			
Strouding Image: Stroud cable attached Image: Stroud cable attached Insulation Condition Image: Stroud cable attached Image: Stroud cable attached PSV Image: Stroud cable attached Image: Stroud cable attached Shell A Heads Image: Stroud cable attached Image: Stroud cable attached Mattal Surfaces (Paint) Image: Accept Painted, no issues noted Image: Stroud cable attached Aux Equipment Image: Stroug cable Image: Stroug cable Image: Stroug cable Aux Equipment Image: Stroug cable Image: Stroug cable Image: Stroug cable Accept Clear, secure Image: Stroug cable Image: Stroug cable Image: Stroug cable Ping: Grom Vessel Image: Clear, secure Image: Stroug cable Image: Stroug cable Image: Stroug cable Previous UT Survey Image: Clear, secure Image: Stroug cable Image: Stroug cable Image: Stroug cable Image: Stroug cable Priority 1 Gas Image: Clear, secure Image: Stroug cable Image: Stroug cable Image: Stroug cable Image: Stroug cable Priority 1 Survey Image: Clear, secure Image: Stroug cable Image: Stroug cable Image: Stroug cable Image: Stroug cable	Foundation and Supports	\square			Accept	Skid Level			
Insulation Condition Image: Condition	Anchor Bolts		\boxtimes			Not fitted			
PSV B Accept Set ressure below MAWP coil B Metal Surfaces (Paint) Accept Accept No damage/deformation noted B Aux Equipment Accept Accept Installed, no issues observed B B Aux Equipment B Accept Installed, no issues observed B B Cathod: Protection B Accept Level, horizontal B B Piging from Vessel B Accept Clear, secure B B Piging from Vessel B Accept Exerce Sume dismantled during insp. B B Temperature Gauge B Accept Clear, secure B B B Protity 0 - Seneral Recommendations No tavaitable for review UT Company: InRISNOT Previous UT Survey B B Coll piping, inlefvoultet, lifetube UT Company: Unknown Edemo Priority 1 - General Recommendations Priority 3 - Goal date is 5 Years from the activity date. Priority 2 - Goal date is 30 days from the activity date. Priority 4 - Goal date is 5 Years from the activity date. Priority 1 - Goal date is 30 days from the activity date. Priority 4 - Goal date is 5 Years	Grounding	\boxtimes			Accept	Ground cable attached			
Shell & Heads Image: Construction of the second of the	Insulation Condition	\boxtimes			Accept	No major cladding damage			
Mail Surfaces (Paint) Image: Accept Painted, no issues observed Image: Accept Painted, no issues noted Aux Equipment Image: Accept Painted, no issues noted Image: Accept Painted, no issues noted Image: Accept Painted, no issues noted Aigmment Image: Accept Painted, no issues noted Image: Accept Painted, no issues Image: Accept Painted, no issues Image: Accept Painted, no issues Pressure Gauge Image: Accept Painted, no issues Priping from Vessel Image: Accept Painted, no issues Image: Accept Painted, no issues Image: Accept Painted, no issues StyleAccept Score Image: Accept Painted, no issues Image: Accept Painted, no issues Image: Accept Painted, no issues Current UT Survey Image: Accept Painted, intervoluted, firetube UT Company: INKnown Leaks Image: Accept Priority 3 - Goal date is 1 Year from the activity date. Priority 1 - Goal date is 30 days from the activity date. Priority 1 - Goal date is 30 days from the activity date. Priority 4 - Goal date is 5 Years from the activity date. Priping was dismantled at inlet & outlet. Image: Accept Painted, Accept Pai		\boxtimes			Accept	Set pressure below MAWP coil			
Aux Equipment Image: Construction	Shell & Heads	\square			Accept	No damage/deformation noted			
Status Not fitted Image Connections Image Connections <td>Metal Surfaces (Paint)</td> <td>\boxtimes</td> <td></td> <td></td> <td>Accept</td> <td>Painted, no issues observed</td> <td></td> <td></td> <td></td>	Metal Surfaces (Paint)	\boxtimes			Accept	Painted, no issues observed			
Alignment Image Connections Image Conn	Aux Equipment	\boxtimes			Accept	Installed, no issues noted			
State Edwards Network Pressure Gauge Accept Clear, secure Image: Connections <	Cathodic Protection			\boxtimes		Not fitted			
Pressure Gauge Image: Clear, secure Image: Clear, secure Image: Clear, secure Sight Class Image: Clear, secure Image: Clear, secure Image: Clear, secure Sight Class Image: Clear, secure Image: Clear, secure Image: Clear, secure Current UT Survey Image: Clear, secure Image: Clear, secure Image: Clear, secure Current UT Survey Image: Clear, secure Image: Clear, secure Image: Clear, secure Current UT Survey Image: Clear, secure Image: Clear, secure Image: Clear, secure Pricotity 0 - General Recommendations Not available for review UT Company: IntRistor Pricotity 1 - Goal date is 30 days from the activity date Priority 3 - Goal date is 5 Years from the activity date. Priority 2 - Goal date is 90 days from the activity date. Priority 4 - Goal date is 5 Years from the activity date. External Visual Observations Manual Review Required By Customer Representative - Yes Vessel was dismantied at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. Status Street, Edmonton, Alberts TRE STP Phone: (780) 437-2022 fac (780) 438-4073 Creater of the date secure (780) 477-4024 Vessel was dismantied at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. Creat 449-497-302 <td>Alignment</td> <td>\boxtimes</td> <td></td> <td></td> <td>Accept</td> <td>Level, horizontal</td> <td></td> <td></td> <td></td>	Alignment	\boxtimes			Accept	Level, horizontal			
Biging from Vessel Image: Accept Some dismantled, no issues Image: Accept Some dismantled, no issues Image: Accept Some dismantled, no issues Image: Accept Image: Accecpt Image: Accept <t< td=""><td>Flange Connections</td><td></td><td></td><td></td><td>-</td><td>Flanges dismantled during insp.</td><td></td><td></td><td></td></t<>	Flange Connections				-	Flanges dismantled during insp.			
Priping from Vessel Image: Accept Some dismantled, no issues Image: Accept Clear, secure Image: Accept Clear, secure Image: Accept Clear, secure Image: Accept Image: Accept Clear, secure Image: Accept Image: Accecet Image: Accecet	Pressure Gauge				-	Clear, secure			
Temperature Gauge Accept Clear, secure Image: Clear, secure Image: Clear, secure Sight Glass Image: Clear, secure Image: Clear,	<u> </u>				-				
Sight Glass Image: Control of the second					-		П		
Leaks Image: Current UT Survey Image: Coll piping, inlet/outlet, firetube UT Company: IRISNDT Previous UT Survey Image: Coll piping, inlet/outlet, firetube UT Company: Unknown LECEND: Priority 0 - General Recommendations Priority 3 - Goal date is 1 Year from the activity date. Priority 2 - Goal date is 30 days from the activity date. Priority 2 - Goal date is 90 days from the activity date. Priority 4 - Goal date is 5 Years from the activity date. External Visual Observations Manual Review Required By Customer Representative - Yes Vessel was dismantled for internal inspection. Firetube was removed. Piping was dismantled to internal inspection. Firetube was removed. UT survet of inlet/outlet elbows showed no issues. State 30 days from: (780) 437-2022 tax: (780) 482-4973 Coll Labor 30 days from the activity 472-4984 Rep Erect 400 days and 40 days									
EXIT-96 Street, Edmontor, Athenta T6E 578 Prome: (780) 437-2022 fac: (780) 456-4873 Coll piping, inlet/outlet, firetube UT Company: IRISNDT EXIT-96 Street, Edmontor, Athenta T6E 578 Prome: (780) 437-2022 fac: (780) 456-4873 Coll piping, inlet/outlet, firetube UT Company: IRISNDT EXIT-96 Street, Edmontor, Athenta T6E 578 Prome: (780) 437-2022 fac: (780) 456-4873 Coll piping, inlet/outlet From the activity date.									
EXECUTE: Not available for review UT Company: Unknown LEGEND: Priority 0 - General Recommendations Priority 3 - Goal date is 1 Year from the activity date. Priority 1 - Goal date is 30 days from the activity date Priority 2 - Goal date is 90 days from the activity date. Priority 2 - Goal date is 5 Years from the activity date. External Visual Observations Manual Review Required By Customer Representative - Yes Vessel was dismantled for internal inspection. Firetube was removed. Piping was dismantled at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. External Visual Observations Vessel was dismantled at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. State of the stat							UT	Company: IR	ISNDT
EEGEND: Priority 0 - General Recommendations Priority 1 - Goal date is 30 days from the activity date. Priority 2 - Goal date is 90 days from the activity date. Priority 3 - Goal date is 5 Years from the activity date. Priority 4 - Goal date is 5 Years from the activity date. External Visual Observations Manual Review Required By Customer Representative - Yes Vessel was dismantled for internal inspection. Firetube was removed. Piping was dismantled at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. E311-36 Street. Edmonton, Alberta TRE 573 Phone: (780) 437-2022 fac: (780) 436-4873 (780) 975-9458 (780) 975-9458 E311-36 Street. Edmonton, Alberta TRE 573 Phone: (780) 437-2022 fac: (780) 437-4202 fac: (780									
Priority 0 - General Recommendations Priority 1 - Goal date is 30 days from the activity date. Priority 2 - Goal date is 50 days from the activity date. Priority 3 - Goal date is 5 Years from the activity date. Priority 4 - Goal date is 5 Years from the activity date. External Visual Observations Manual Review Required By Customer Representative - Yes Vessel was dismantled for internal inspection. Firetube was removed. Piping was dismantled at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. Status of Street, Edmonton, Alberta TRE 578 Phone: (780) 437-2022 fac: (780) 458-4673 (780) 275-9453 Cran Priority 7790 226-6106 Fort McMurray (780) 275-9453 Status (780) 275-9453 Fort McMurray (780) 275-9453 Engineering, Calgary (780) 437-2022 (780) 437-4227							•.	e epaj. e.	
Priority 1 - Goal date is 30 days from the activity date. Priority 4 - Goal date is 5 Years from the activity date. External Visual Observations Manual Review Required By Customer Representative - Yes Vessel was dismantled for internal inspection. Firetube was removed. Priping was dismantled at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. Status of the state of the									
Priority 2 - Goal date is 90 days from the activity date. External Visual Observations Manual Review Required By Customer Representative - Yes Vessel was dismantled for internal inspection. Firetube was removed. Piping was dismantled at inlet & outlet. UT survet of inlet/outlet elbows showed no issues.	-					-		-	
Manual Review Required By Customer Representative - Yes Vessel was dismantled for internal inspection. Firetube was removed. Piping was dismantled at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. Status and the state of the st	-	-			-	Priority 4 - Goal date	e is 5 Years f	from the activi	ty date.
S311 - 86 Street. Edmonton, Alberta TRE ST8 Phone: (780) 437-2022 fax: (780) 436-4873 Calgary (403) 277-9894 Loydininster (780) 875-4555 Fort McMurray (780) 875-4305 Fort McMurray (780) 877-4315 Earthead (780) 877-4315 Red Deer (403) 247-1742 Red Deer (403) 247-1742 Red Deer (403) 247-1742	Priority 2 - Goal date is 90	days	from	the ac	tivity date.				
Site tempore Firetube was removed. Piping was dismantled at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. 5311-86 Street, Edmonton, Alberta T6E 578 Phone: (780) 437-2022 fax: (780) 436-4873 Coll ask (780) 826-6105 Engineering, Calgary (403) 277-8612 Loydminster (780) 875-4855 Fort McMurray (780) 743-1582 Rathead (780) 674-3015 Rathead Rathead	External Visual Observations	6				Manual Review Requi	red By Cust	omer Represe	ntative - Yes
Piping was dismantled at inlet & outlet. UT survet of inlet/outlet elbows showed no issues. 5311 -86 Street, Edmonton, Alberta T6E 578 Phone: (780) 437-2022 fax: (780) 436-4873 Calgary (403) 279-6121 Cold Lake (780) 826-6105 Engineering, Calgary (403) 217-9684 Lloydminster (780) 872-6455 For McMurray (780) 724-1536 Engineering, Calgary (403) 217-9684 Engineering, Calgary (403) 217-9684 Services (780) 872-6455 For McMurray (780) 734-1536 Engineering, Calgary (403) 217-9684 Engineering, Calgary (403) 217-9684 Engineering, Calgary (403) 217-9684 Cold Lake (780) 826-6105 Engineering, Calgary (403) 217-9684 Cold Calgary (780) 873-7022 Engineering, Calgary (403) 217-9684 Engineering, Calgary (403) 217-9684 Engineering, Calgary (403) 217-9684 Cold Calgary (780) 873-7022 Cold Calgary (780) 873-7022 Cold Calgary (780) 873-702 Cold Calgary (780) 873-702 C	Vessel was dismantled for int	ernal i	nspec	tion.					
UT survet of inlet/outlet elbows showed no issues.	Firetube was removed.								
UT survet of inlet/outlet elbows showed no issues.	Piping was dismantled at inle	t & out	tlet.						
Calgary (403) 279-6121 Cold Lake (780) 826-6105 Engineering, Calgary (403) 217-9684 Lloydminster (780) 875-6455 Fort McMurray (780) 743-1536 Engineering, Edmonton (780) 437-2022 Barrhead (780) 674-3018 Red Deer (403) 347-1742 Rope Access Services (780) 437-2022	UT survet of inlet/outlet elbow	s sho	wed no	o issues	3.				
Calgary (403) 279-6121 Cold Lake (780) 826-6105 Engineering, Calgary (403) 217-9684 Lloydminster (780) 875-6455 Fort McMurray (780) 743-1536 Engineering, Edmonton (780) 437-2022 Barrhead (780) 674-3018 Red Deer (403) 347-1742 Rope Access Services (780) 437-2022									
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Barrhead (780) 674-3018 Red Deer (403) 347-1742 Rope Access Services (780) 437-2022	Calgary (403) 279-61	21	. (.	,	Cold L	ake (780) 826-6105			
	Barrhead (780) 674-30	18						Rope Access Serv	rices (780) 437-2022

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Offices also located in USA and UK

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30-Oct-15

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									IRISNDT #:	173502
	Client:	CHE	VRON	١	LSD:	D	-34-K/94-O-05	Jurisdiction	1#: A	573595
-	Internal Inspection Result						<u> </u>			
_						inica	-			
	Item	Y	Ν	N/A	Condition		Comment	NCR	Action Item	Priority
	Shell	\square			Accept	No deform	ation, damage			
	Heads		\square			Tubesheet	s only			
	Manway	\square			Accept		ough removed firetub			
	Gasket Surfaces	\square			Accept		proper cleaning			
	Welds				Accept		/damage observed			
	Refractory			\square		Not fitted				
	Heating Coils				Accept	No visible	damage			
	Demister Pad					Not fitted				
	Vane Pack					Not fitted				
	Baffles				Accept	-	e observed			
	Trays			\square		Not fitted				
	Filter					Not fitted				
	Internal Coating			\square		Not fitted				
	Tubesheet				Accept	No issues				
	Tube Bundle	\square			Accept	See heatir	ig coils			
	LEGEND:									
	Priority 0 - General Reco	ommer	ndatio	ns.			Priority 3 - Goal date	is 1 Year fro	m the activity	date.
	Priority 1 - Goal date is 3				tivity date		Priority 4 - Goal date		-	
	Priority 2 - Goal date is 9									
	-		o non	r the at						
lr	nternal Visual Observation	ns					Manual Review Require	ed By Custon	ner Representa	ative - Yes
	The line heater fire tube wa	s remo	ved fo	r an inte	rnal inspection	า.				
	Vessel was drained and wa	shad								
		isneu.								
	Firetube showed typical dis									
	were MPI tested for crackin	ig. No r	elevan	it indicat	ions were obs	erved. A UI	CML survey was conducte	ed on the firetu	be. No issues w	ere observed.
	Coil tube bundle was inspe									
	deposits were identified. Tu	ube baff	le plat	e appea	red in good co	ondition. A U	T CML survey was perforn	ned on coil retu	Irn bends acces	sible from open
	end. Some general wall los locations.	s not be	elow m	ninimum	thickness was	s identified o	n individual return bend ell	bows. See UT	CML spreadshe	et for specific
	No issues were observed in	nternally	y on th	e therm	ocouples, noz	zles, shell o	r internal welds. Only inter	nal surfaces a	ccessible from st	anding at the
	open end were inspected.									
	5311 - 86 Street, Edmonton, Alberta T		Phone: (780) 437-						
L	Calgary (403) 279 Loydminster (780) 875	-6455			Cold La Fort Mc		(780) 826-6105 (780) 743-1536		Engineering, Calgary Engineering, Edmonto	(403) 217-9684 (780) 437-2022
E	Barrhead (780) 674 Nisku (780) 955	-3018			Red De	er	(403) 347-1742 sndt.com		Rope Access Service Offices also located in	
-	(, 000	-				vv vv vv.111		,	eooo aloo idbated II	

IR			ע זיי	ESSEL INSPECT SUMMARY	ΓΙΟΝ	Report #: Inspect Date: Page: IRISNDT #:	d34K-173502-01 30-Oct-15 4 of 10 173502		
Clien	t: CHEVRON	LSD:	D-34-K/	94-O-05 Ju	urisdictior	ו #:A	573595		
Additional Attach		<u>N/A</u>	Specify N		tion Repo	ort # N/A			
Performed: NDE Report #: Items Raised:	Associated UT CML Sp	PT ET preadsheets & Atta rational Action Iten	ched MT Repo	THER		_173502_CA03 Deferred Actio			
Action Items / R	ecommendations:								
	itor general wall loss in coi on intervals to ensure safe	-	elbows.						
Actions Correc	ted at Time of Inspectio	n: (If actions were corr	ected at the time o	Inspection – note the correct	cted actions	s here.)			
No corrective act	No corrective actions were taken at time of inspection.								
Meets Code Cr	iteria: - Yes		Re	Inspection Required	- No				
Recommended	Inspection Intervals:								
VE Inspect.	Last Inspection:	Oct - 2015	Interval (y	-		ext Inspection:			
VI Inspect.	Last Inspection:	Oct - 2015	Interval (y			ext Inspection:			
UT Inspect. PSV Service	Last Inspection: Last Inspection:	Oct - 2015	Interval ()	-		ext Inspection: ext Inspection:			
Unit #: 560	Kilometers: N/A		Consumables	Inspector					
In: <u>00:00</u> In: <u>00:00</u>	Out: 00:00 Out: 00:00 Ut: 00:00 Ut: De-ann Perrey	Hrs: Hrs:		•	hew Macka (Print) (Sign) tative (Print) (Sign)	Oct 31/15			
5311 - 86 Street, Edmor Calgary Lloydminster Barrhead Nisku	tton, Alberta T6E 5T8 Phone: (78 (403) 279-6121 (780) 875-6455 (780) 674-3018 (780) 955-7616	0) 437-2022 fax: (780) 436 Cold Lak Fort McM Red Deer	e (780 lurray (780)) 826-6105)) 743-1536)) 347-1742 m		Engineering, Calgary Engineering, Edmonto Rope Access Service Offices also located in	on (780) 437-2022 s (780) 437-2022		



Equipment Photographs:



03 - H-500 LINEHEATER OVERVIEW

04 - H-500 LINEHEATER INLET & OUTLET DISMANTLED

5311 - 86 Street, Edm	5311 - 86 Street, Edmonton, Alberta T6E 5T8 Phone: (780) 437-2022 fax: (780) 436-4873										
Calgary	(403) 279-6121	Cold Lake	(780) 826-6105	Engineering, Calgary	(403) 217-9684						
Lloydminster	(780) 875-6455	Fort McMurray	(780) 743-1536	Engineering, Edmonton	(780) 437-2022						
Barrhead	(780) 674-3018	Red Deer	(403) 347-1742	Rope Access Services	(780) 437-2022						
Nisku	(780) 955-7616	www.irisndt.com		Offices also located in USA	and UK						







05 - H-500 LINEHEATER SKID 7 PILINGS

06 - H-500 LINEHEATER SKID 7 GROUND CABLE



07 - H-500 LINEHEATER BURNER

08 - H-500 LINEHEATER FIRETUBE OVERVIEW

5311 - 86 Street, Edmonton, Alberta T6E 5T8 Phone: (780) 437-2022 fax: (780) 436-4873										
Calgary	(403) 279-6121	Cold Lake	(780) 826-6105	Engineering, Calgary	(403) 217-9684					
Lloydminster	(780) 875-6455	Fort McMurray	(780) 743-1536	Engineering, Edmonton	(780) 437-2022					
Barrhead	(780) 674-3018	Red Deer	(403) 347-1742	Rope Access Services	(780) 437-2022					
Nisku	(780) 955-7616	www	.irisndt.com	Offices also located in USA	and UK					



VESSEL INSPECTION SUMMARY

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 30-Oct-15

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 173502





09 - H-500 LINEHEATER FIRETUBE OVERVIEW	10 - H-500 LINEHEATER FIRETUBE BURNER SIDE





11 - H-500 LINEHEATER FIRETUBE BURNER SIDE DISCOLORATION

12 - H-500 LINEHEATER FIRETUBE BURNER SIDE DISCOLORATION

5311 - 86 Street, Ed	5311 - 86 Street, Edmonton, Alberta T6E 5T8 Phone: (780) 437-2022 fax: (780) 436-4873									
Calgary	(403) 279-6121	Cold Lake	(780) 826-6105	Engineering, Calgary	(403) 217-9684					
Lloydminster	(780) 875-6455	Fort McMurray	(780) 743-1536	Engineering, Edmonton	(780) 437-2022					
Barrhead	(780) 674-3018	Red Deer	(403) 347-1742	Rope Access Services	(780) 437-2022					
Nisku	(780) 955-7616	www	.irisndt.com	Offices also located in USA	and UK					



VESSEL INSPECTION SUMMARY





13 - H-500 LINEHEATER OPEN SHELL

14 - H-500 LINEHEATER SHELL BOTTOM





15 - H-500 LINEHEATER EXPANSION TANK & LEVEL GAUGE

16 - H-500 LINEHEATER COIL

5311 - 86 Street, Edmontor	n, Alberta T6E 5T8 Phone: (780) 437-2022 fax:	: (780) 436-4873			
Calgary	(403) 279-6121	Cold Lake	(780) 826-6105	Engineering, Calgary	(403) 217-9684
Lloydminster	(780) 875-6455	Fort McMurray	(780) 743-1536	Engineering, Edmonton	(780) 437-2022
Barrhead	(780) 674-3018	Red Deer	(403) 347-1742	Rope Access Services	(780) 437-2022
Nisku	(780) 955-7616	www.irisr	ndt.com	Offices also located in USA and	UK



VESSEL INSPECTION SUMMARY

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17 - H-500 LINEHEATER PROBES	18 - H-500 LINEHEATER PRE-HEAT LINE
<image/>	
19 - H-500 LINEHEATER PSV OVERVIEW	

5311 - 86 Street, Edmo	5311 - 86 Street, Edmonton, Alberta T6E 5T8 Phone: (780) 437-2022 fax: (780) 436-4873										
Calgary	(403) 279-6121	Cold Lake	(780) 826-6105	Engineering, Calgary	(403) 217-9684						
Lloydminster	(780) 875-6455	Fort McMurray	(780) 743-1536	Engineering, Edmonton	(780) 437-2022						
Barrhead	(780) 674-3018	Red Deer	(403) 347-1742	Rope Access Services	(780) 437-2022						
Nisku	(780) 955-7616	www	www.irisndt.com		and UK						



191		DT		ETIC PARTICL	
Procedure: 5.0 Technique: MT-2V Code: ASME Sect VIII Div. Other: Crack check	Rev 1 1 - App 6-4	Client: IRISNDT Location: Item Insp	d-34-K/94	-O-05 Liard neheater Firetube	Date: 31-Oct-15 Other: H-500 Other: A573595
Surface Condition: Pa	ainted Sandblast	ed 🗌 Machined 🔲	As Cast	As Forged Weldn	ment 🛛 Other 🗌
Material: Carbon Steel			Thic	kness: .250" approx	Heat Treatment: N/A
Magnetizing Equipment:	Yoke 🛛 Coil 🗌	Permanent []IRISNDT	#: 40155	Mfg: Parker	Calibration Date: 6-Oct-15
Method of Magnetization:	AC 🛛 DC 🗌	Continuous 🖂			
Blacklight: Y 🗌 N/A 🛛	IRISNDT #: N/A Verification per ASM	ME V Art 7 T.777.2	Black		IDT #: N/A ration Date:
Vhitelight: Y 🛛 N/A 🗌	Verification per ASM	ME V Art 7 T.777.1	Light	ing Equipment: Yoke	Light (10W)
Magnetic Particles:	Dry Wet Batch #: 1168-12	Red [Mfg:	Grey 🗋 Magnaflux	Black I Fluoresce Type: 70	
Background: 🛛	Batch #: 1326	Mfg:	Ardrox	Type: 89	901W
Inspection Limitation(s):					
Unit#: <u>560</u> K In: Out: In: Out: Personnel: MM DP	Hrs:	Consumables: MT-Min.		Interpretation by: Matthew Mackay (Print) (Signafure) Client Representative: (Print) Lam in full agreement with report contents (Sign)	SNT-TC-1A: II C.G.S.B.: II (Level) Cct 31/15 C.G.S.B.#: 12580
5311-86 Steet, Edmonton, Alberta T6 Calgary (403) 279-61 Lloydminster (780) 875-64 Barrhead (780) 674-30 Nisku (780) 955-76	21 55 18	022 fax: (780) 436-4873 Cold Lake Fort McMurray Red Deer www.irisr	(780) 826-6105 (780) 743-1536 (403) 347-1742 idt.com		Engineering, Calgary (403) 217-9 Engineering, Edmonton (780) 437-2 Rope Access Services (780) 437-2 Offices also located in USA and UK IRISNDT-E-200

5311 - 86 Street, Edmonton, Alberta T6E 5T8 Phone: (780) 437-2022 fax: (780) 436-4873									
Calgary	(403) 279-6121	Cold Lake	(780) 826-6105	Engineering, Calgary	(403) 217-9684				
Lloydminster	(780) 875-6455	Fort McMurray	(780) 743-1536	Engineering, Edmonton	(780) 437-2022				
Barrhead	(780) 674-3018	Red Deer	(403) 347-1742	Rope Access Services	(780) 437-2022				
Nisku	(780) 955-7616	www.irisndt.com		Offices also located in USA	Offices also located in USA and UK				